

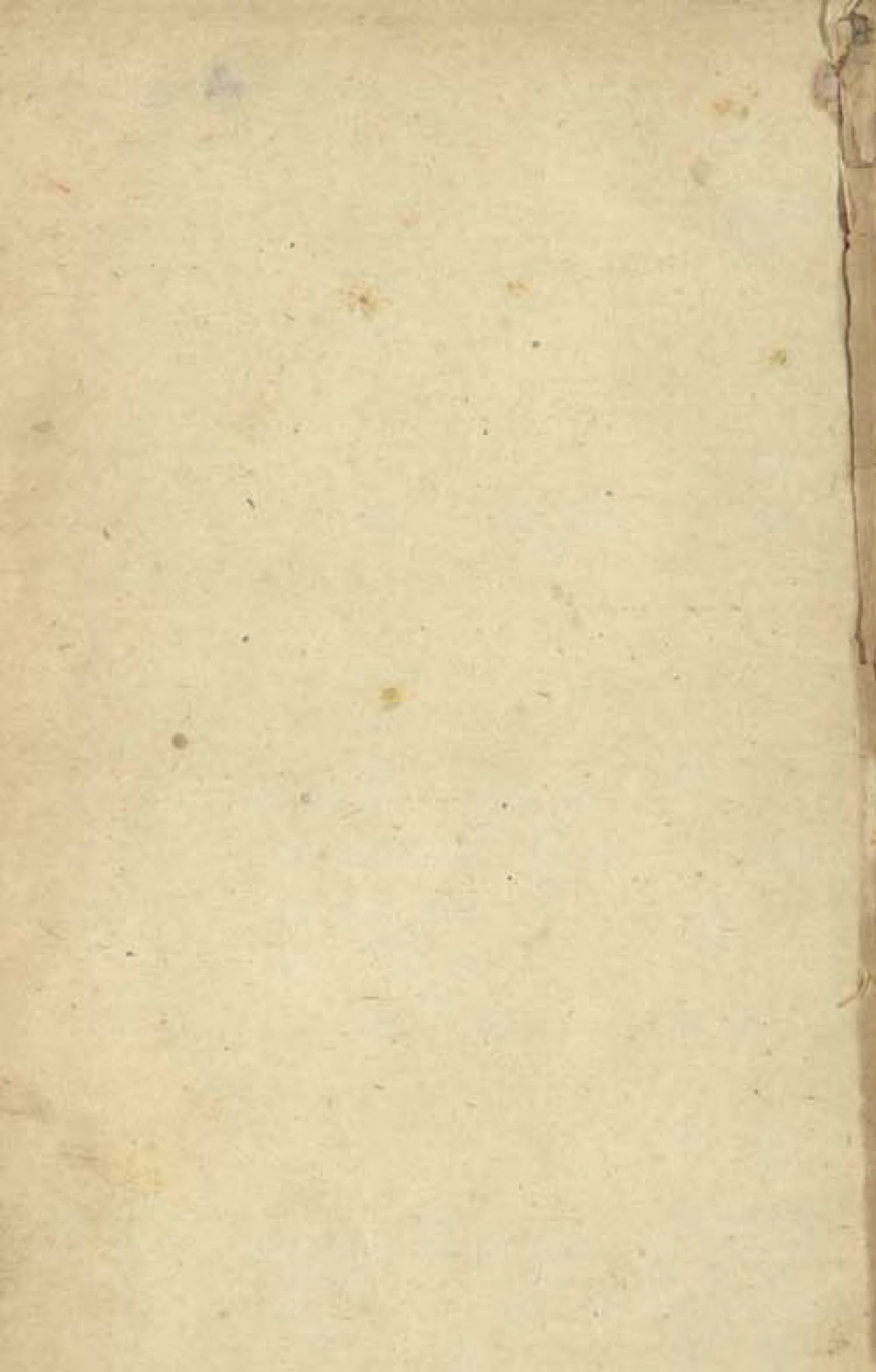
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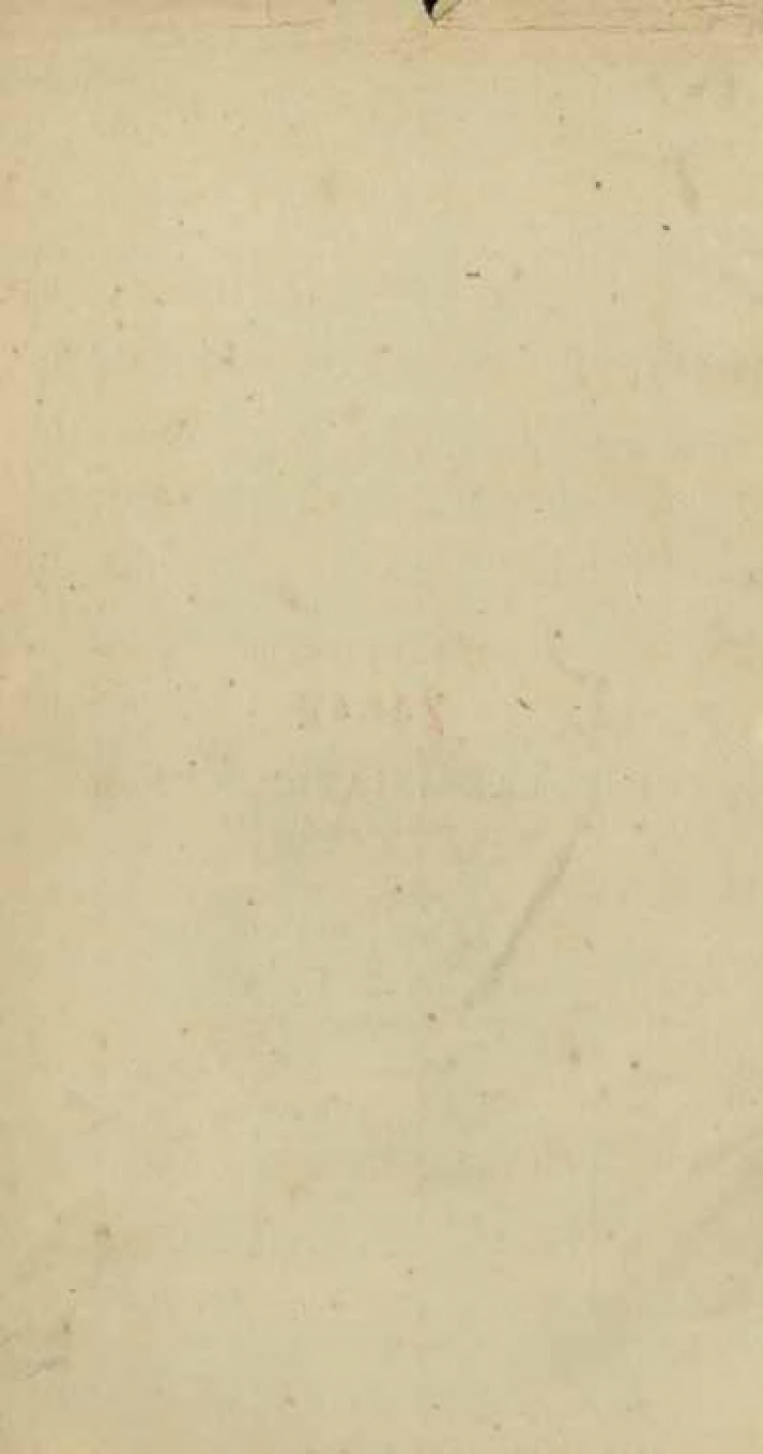
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THE JOURNAL
OF
THE ROYAL ASIATIC SOCIETY

(12)



*For facility of reference this Appendix will be published with
the April and October Numbers of the Journal.*

TRANSLITERATION
OF THE
SANSKRIT, ARABIC,
AND ALLIED ALPHABETS.

THE system of Transliteration shown in the Tables given overleaf is almost identical with that approved of by the International ORIENTAL CONGRESS of 1894; and, in a Resolution, dated October, 1896, the Council of the ROYAL ASIATIC SOCIETY earnestly recommended its adoption (so far as possible) by all in this country engaged in Oriental studies, "that the very great benefit of a uniform system" may be gradually obtained.

SANSKRIT AND ALLIED ALPHABETS.

अ a	ओ o	ट ṭ	व v
आ ā	औ au	ठ ṭh	भ bh
इ i	क k	ड ḍ	म m
ई ī	ख kh	ढ ḍh	य y
उ u	ग g	ण ṇ	र r
ऊ ū	घ gh	त t	ल l
ए e	ङ ṅ	थ th	व v
ऐ ai	च c	द d	श ś
	छ ch	ध dh	ष ṣ
	ज j	न n	स s
	झ jh	प p	ह h
	ञ ñ	फ ph	ळ ḷ

◌̣ (Anusvāra) ṃ

◌̤ (Anunāsika) m̤

◌̥ (Visarga) h̥

x (Jihvāmūliya) ḥ

y (Upadhmanīya) ḥ

‡ (Avagraha) ‡

Udātta ˆ

Scarita ˆ

Anudātta ˘

II.

ARABIC AND ALLIED ALPHABETS.

ا at beginning of word omit; elsewhere . . . <u>o</u> or <u>o</u>	ك k	آ a
ب b	ل l	ع i
ت t	م m	و u
ث t or <u>th</u>	ن n	
ج j or <u>dj</u>	و w or v	DIPHTHONGS.
ح h	ه h	ي ai
خ h or <u>kh</u>	ي y	ؤ au
د d		wasla '.
ذ d or <u>dh</u>	VOWELS.	hamza <u>o</u> or <u>o</u>
ر r	ا a	silent t h
ز z	ي i	letter not pronounced
	u u	

ADDITIONAL LETTERS.

PERSIAN, HINDI, AND PAKHSTŪ.	TURKISH ONLY.	HINDI AND PAKHTŪ.	PAKHTŪ ONLY.
پ p	ک when pronounced as g k	پ or ت t	خ ts
چ c or <u>ch</u>		د or ذ d	ج g
ژ z or <u>zh</u>		ز or ر r	ن n
گ g	ن n		ش ksh

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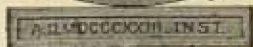
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JOURNAL
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1915

I

EXAMPLES OF TIBETAN SEALS

By E. H. WALSH

THE subject of Tibetan seals has already been discussed in this Journal in connexion with the seal of the Dalai Lama, the reading of which was first given by Dr. Bushell in JRAS. 1906, p. 476, referring to the illustration of the seal in Colonel Waddell's *Lhasa and its Mysteries*, in his review of that book. But he gave no examples of the character.

The Rev. Dr. A. H. Francke in his "Note on the Dalai Lama's Seal and the Tibeto-Mongolian Character" (JRAS. 1910, p. 1205) has deciphered the inscription on the seal, and has also given the alphabet of the Tibetan seal character which he obtained from a Tibetan wood-print discovered in Ladakh. He also gave the inscription on the seal of the rNam-rgyal dynasty of Western Tibet. In the present article I give some further examples of Tibetan seals in the above character, and also of others in which the inscriptions are in Indian character, or which merely bear an ornamental design.

Tibetan seals generally bear an inscription in the above character, which is known as *Hor-yig*, viz. "Mongolian letters". It is, as Dr. Francke has shown, an archaic



square form of the Tibetan character with the letters arranged one below the other in vertical columns, and "was invented by the Saskya hierarch Kun dga rgyal mtshan, A.D. 1182-1252, who presented it to the Mongolians. They were to use it for their newly started literature. The characters were, however, too clumsy for general use, and the Mongolians preferred a form of the Uigur alphabet which was founded on the Syriac characters of the Nestorians".



Dr. Francke gave a corrected copy of the Dalai Lama's seal, with certain letters amended according to the Ladakh alphabet, from two reproductions of the seal which formed illustrations, the one to Waddell's *Lhasa and its Mysteries*, p. 448, and the other to a paper of mine on the Coinage of Tibet,¹ in both of which certain letters which had been indistinct in the original impression of the seal had not been correctly reproduced. As I have already pointed out,² the illustration of the seal which I gave in my paper referred to was copied from the facsimile of the seal given in Landon's *Lhasa*; as an impression of the seal which I then had was very indistinct, which is frequently the case with Tibetan seals, and as the purpose of the reference to the seal in that paper was not concerned with the meaning of the characters on the seal or their precise form, I had not thought it necessary to compare it with other illustrations.


I have, however, since obtained an absolutely clear impression of the seal, which was given me by the Dalai Lama himself on a copy of his portrait which he gave me when he was in Darjeeling. A drawing of it will be found in Fig. 1 of the Plate facing p. 15. The characters are as shown by Dr. Francke in his corrected drawing of the seal, with the exception of the bottom word of the middle column, which was not clear on the previously published

¹ MASE., vol. ii, p. 16.

² JRAS. January, 1911, p. 207.

impressions, and which Dr. Francke gives in his corrected reading of the seal as  *ru*. This word is really  *rtsa*, "original authoritative," as was afterwards noted by Colonel Waddell (JASB. 1911, p. 204), and means the "official" seal. The inscription on the seal is therefore (snake-ornament) *Talai blamai rtsa thamka rgyal*, namely, "The royal official seal of the Dalai Lama." He has also his private seal, which is a different one.

The form  of the letter *tsa* differs from the form of that letter  given in the Ladakh block-print alphabet.

I am unable to agree with Colonel Waddell, who reads the last character as *wa* and the last word as *rgyal-wa*, and translates "The original seal of the Dalai Lama, the Jina". I agree with Dr. Francke (JRAS. 1911, p. 529) that the word *rgyal* from its position must refer to *thamka*, "the seal," and not to the Dalai Lama. I may also say that this is the sense in which the Tibetan Minister read the seal, and also Dr. Bushell, who reads it "The royal seal of the Dalai Lama", as the word *rtsa* was illegible and had therefore to be omitted. The last character on the seal,  which Colonel Waddell reads as *wa*, is merely to fill up the line. Such stops are common in Tibetan seals. Examples will be found of this identical form of stop to fill up a column in both the seals of the Prime Minister of which I give illustrations further on, namely, at the bottom of the fourth column of the Prime Minister's first seal and at the bottom of the second and fifth columns of the Prime Minister's second seal, at the bottom of the right-hand column of the seal of the two Jong-pöns of Gyantse, and at the bottom of the left-hand column of the recent seal of the Joint Tibetan Trade Agent at Gyantse, in all of which places, as will be seen from the reading of those seals, the word *wa* would be quite meaningless. Also in an earlier form of the

Dalai Lama's seal, which Dr. Francke has published in JRAS. 1912, p. 747, this character does not appear at the end of the seal, as it would do if it were part of the inscription.

With regard to the initial character which Colonel Waddell reads as *Om* (JRAS. 1911, p. 822), I would remark that, whatever the origin of the initial character which is placed at the commencement of all documents and which is commonly known in Tibetan as *ngo-shad* ("head mark" or "initial mark") may be, it is not, as a matter of practice, read at all. I have never heard it read as *Om*, and in an explanation of the meaning of the Dalai Lama's seal, word by word, given me by one of the Tibetan ministers of his own accord when I was inquiring about the matter, there is no reference to this sign, as would be expected, if it is considered to be *Om* and to be part of the inscription, but the explanation as written by him commences with the word *Talai*.

The inscription on the earlier form of the seal, published by Dr. Francke (JRAS. 1912, p. 747), is *Dorje 'achang: Talai blama-yi tham-ka rgyal*. This seal appears on a letter of the Dalai Lama which Mr. F. Becker Shawe, a Moravian missionary of Leh, found preserved in the archives of one of the old noble families of Ladakh, and photographed between the years 1891 and 1895. It would be interesting to know what is the date of the letter. But, owing to the Tibetan system of sixty-year cycles, the date cannot be ascertained from the letter itself, which will only give the year within the cycle. It will therefore have to be obtained from external sources.

Besides the Dalai Lama's official seal he has also a private seal, which is given in Fig. 3 of the Plate. This seal was impressed in sealing-wax on the outside of a letter, and therefore differs from the other seals illustrated, as the design is cut into the seal, and is not in relief, as in the case of the other seals, which are

sealed in ink. An enlargement of the design on the seal is given below.



The characters on this seal, though resembling the Hor-yig in general appearance as being of square form and written in vertical columns, are quite different, and appear to be merely ornamental and without meaning.

As the three dots outside the central enclosure indicate the top of the seal, the characters therefore appear to be quite meaningless. If, however, the seal be read the other way up, the bottom group of characters in the third column might be *gyan*, namely "ornament", though they would be a form of square character different to the Hor-yig, which is used on all the other examples of seals. But, even then, I am unable to suggest any meaning for the other characters; and the two outside columns are somewhat rounded in form and appear to be only ornamental designs. I think, however, that the characters must have some significance, and may possibly be imitations of characters or symbols on old Mongolian seals.

The seals of the Lön-Chhen or Prime Minister of Tibet are an interesting example of the seal character.

The impression of the first seal was given me by the Prime Minister, Srid-dzin Lön-chhen Shattru, when he was with the Dalai Lama in Darjeeling in 1911, and the impression of the second seal this year in Delhi. The

inscription on both the seals is mainly the same, though somewhat shorter in the second seal, seven words being omitted, and the character is consequently larger. I give below a facsimile of the first seal.



This seal consists of seven columns; there are five words in each of the first six columns and four in the seventh, the space remaining in the bottom of any column being filled in with meaningless signs.

The inscription, written in the printed character, is as follows :—

ཁྱེ་ལ་	ལྷུང་	པ་ཁྱེ་	ཁྱེ་ལ་	ཁྱེ་ལ་	པ་ཁྱེ་	པ་ཁྱེ་
ར་ལ་	གི་མ་	མ་མ་	ཁྱེ་ལ་	ལྷུང་	གི་མ་	པ་ཁྱེ་
མ་ཁྱེ་ལ་	རྒྱུ་	ལྷུང་	ལྷུང་	ར་ལྷུང་	ར་ལྷུང་	ལྷུང་
གི་	མ་ཁྱེ་	པ་ཁྱེ་	ཁྱེ་ལ་	ལ་མ་	མ་ཁྱེ་	ར་ལྷུང་
པ་ལྷུང་	ར་ལྷུང་	ལྷུང་	པ་ཁྱེ་	ལྷུང་	ར་ལྷུང་	

The vertical columns of the inscription read as follows¹ :—

1. (Snake-ornament) *rgyal dbang mehhog. gi. bkai.*
2. *lung. gi. ngo. mtshar dgah.*
3. *brgya. phrag ldan pai kun.*

¹ In this article ར་ has been transliterated as *h*, as in Rai Sarat Chandra Das's Dictionary, except where it forms the vowels *i*, *u*, *e*, and *o*. It has, however, no aspirated sound and should accurately be transliterated by *o*; ལ་ has been transliterated as *ng*, and ལྷུང་ as *sh*.

4. *khyab. chhos ldan rgyal pai.*
5. *Chhab srid hphrin las kyi.*
6. *bkra shis dge mtshan 'abar.*
7. *bai bde skyid hphel.*

The translation is as follows:—

“By the precepts of the orders of the most powerful king may the good luck and prosperity of the affairs of the kingdom of the all-embracing religious king blaze forth into a hundred thousand pleasures (and) their felicity increase.”

The spaces at the bottom of the columns are filled up with the following apparently meaningless characters:—

Second column	{	卐
Third column		卐
Fourth column		卐
Fifth column		卐
Sixth column		卐
Seventh column		卐

The second seal of the Prime Minister is given below.







There are three words in the first column and four in each of the others. The words *dgah brgya hphrag ldan pai* in the second and third columns of the first seal are omitted, and also the words *bkra-shis* at the top of the sixth column of the first seal. The inscription written in the printed character is as follows:—

ཨ	གི	རྩོ	ཆོས	ཆམ	ཀྱི	པའི
ཀྱིས	པའི་འི	མཆོར	ལྷན	ལྷན	རྩོག	པའི
རྩོག	ལྷན	ལྷན	ཀྱིས	པའི་འི	མཆོར	ལྷན
མཆོག	གིས	ཆམ	པའི་འི	པའི	རྩོག	པའི་འི

The vertical columns read as follows:—

1. (Snake-ornament) *rgyal dbang mchhog*
2. *gi bkai lung gis*
3. *ngo mtshar kun khyab*
4. *chhos ldan rgyal poi*
5. *chhab srid hphrin las*
6. *kyi dge mtshan hbar*
7. *pai bde skyid hphel.*

The space at the bottom of the first line is filled up with a character  and of the second and fifth lines with a plain stop,  like the one at the end of the seal of the Dalai Lama, the third with a character  which is rather indistinctly stamped, and the fourth and sixth with a character .

Illustrations of other seals are given in the Plate.

Tibetan official seals are generally square; all the more important ones, which are in the Hor-yig seal character, are so, though less important official seals and private seals are round and much smaller. Examples of these are the private seal of the Dalai Lama already mentioned, and those of the Private Secretary of the Tashi Lama and of

the Treasurer of the Tashi Lama (Figs. 3, 4, and 5 of the Plate).





The seals of the three great monasteries, Sera, Depung, and Gahdan, are also round.

Some Tibetan seals are always stamped in red and others in black. The official seals of the Dalai Lama (Fig. 1), of the Tashi Lama (Fig. 2), and of the Kyab-ying, viz. the Prime Minister of the Tashi Lama (Fig. 10), and the small seals (Figs. 3, 4, and 5) are always stamped in red, and those of the Council (Fig. 6), the National Assembly (Fig. 7), the Kalon Lama Minister (Fig. 8), the Jong-pöns of Phari (Fig. 9), and of the Abbot of Gyantse Monastery, the Tibetan Trade Agent, and the Jong-pöns at Gyantse, illustrated below, and also those of the three great monasteries are stamped in black.

The seal of the Tibetan Council of Ministers (Fig. 6) bears the usual snake-ornament and the words *sde skyid*, "happiness, felicity," in the centre column. The two side columns are ornamental square characters. This seal was given to the Council by the seventh Dalai Lama (A.D. 1708 to 1758) when the Council was constituted, and the motto was given as showing that the Council was to secure the happiness of the people. The Council, which is known as the Kasha (བཀའ་གྲགས་), from the name of the Council House in Lhasa where it meets, consists of the Shapes (འབམ་པད་) or Ministers, one of whom is always a Lama. The Prime Minister is known as the Lon-chhen, whose seals have been already described, and the Lama Minister as the Ka-lön Lama (བཀའ་ལྷོན་ལྷ་མ་), whose seal is shown in Fig. 8. The seal of the Council was one of the seals affixed to the Tibetan Treaty of 1904.

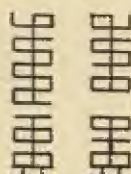
The seal of the National Committee, or Tshong-du Düpa (ཚོགས་འདུ་རྩ་བ་ *Tshogs-hdu dud-pa*), is shown in Fig. 7 and contains two columns. The first column is the snake-ornament and the word *rgyal*, and the second column *zer*

sa. rGyal zer sa may mean either "the place known as victorious" (or "royal"), or "the place of victorious (or 'royal') light", or "the place of victorious (or 'royal') speech".

In the word  *zer*, the letter  *z*, is different from the form in the Ladakh alphabet, which is  The form of the letter  *e*, also differs from the Ladakh alphabet, but is the same as that which occurs in the older seal of the Dalai Lama, JRAS. 1912, p. 747.

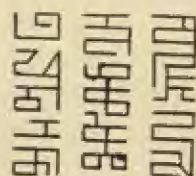
The characters in the right-hand column are distinct on the seal; those in the left-hand column are rather blurred, but they are, I think, as shown.

The seal of the Lama Minister is shown in Fig. 8. In the centre column are the words *bde legs*, "blessing." The two outer columns are square characters, which appear not to represent letters but to be merely ornamental. These characters are as follows:—





The form of the letter *e* in this seal differs from that in the Ladakh alphabet.

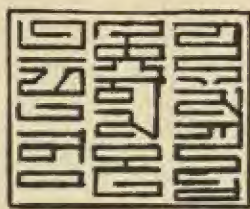
The official seal of the Phari Jong-pöns is shown in Fig. 9. The Jong-pöns (ཡོང་པོན་) are District Officers in charge of a district, at the head-quarters of which is a Jong, or fort. The seal consists of three columns. The inscription is as follows:—



The first column is snake-ornament and the word *phag*, followed by two characters which appear to have no meaning; the second column is *ri*, followed by two characters which appear to have no meaning; and the third column is *bdzongs*. The whole inscription is therefore *phag-ri bdzongs*, namely, "Phari dispatched."

The form of the letter  *dz* differs somewhat from that given in the Ladakh alphabet ()

Three further examples of Tibetan seals are given below. These seals are stamped in black.





Seal of the Abbot
of the Gyantse
Monastery.

(Modern) Seal of the
Tibetan Joint Trade
Agent at Gyantse.

Seal of the Jong-
pons of Gyantse.

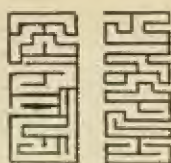
The first is the official seal of the Abbot of the *dPal-hKhor-Chhos-sDe* Monastery at Gyantse. The inscription is: first column, *dpal-chhos*; second column, *spyi dag*. The inscription is abbreviated for *dPal-hKhor-Chhos-sDe spyi-khyab dag-po*, "the pure Head Official of the *dPal-hKhor-Chhos-sDe* Monastery." The Abbot also has a private seal, which, like other private seals, is a small round seal.

The second is the seal of the Tibetan Joint Trade Agent at Gyantse, and is therefore quite modern.

The inscription is : first column (snake-ornament), *Phun*, and a character  to fill up the column; second column, *Tshogs* and a character  to fill up the column; third column, *bde skyid*. The whole inscription being, *Phun-Tshogs bde skyid*, "sublime blessing" or "the blessing of Heaven".

The third seal is the official seal of the Jong-pöns of Gyantse. The inscription is: first column (snake-ornament), *rgyal*; second column, *rdzong*. It is literally "the Royal Fort", but is intended for *rGyal-tse rdzong*, "Gyantse Fort" (i.e. "Royal Peak Fort").

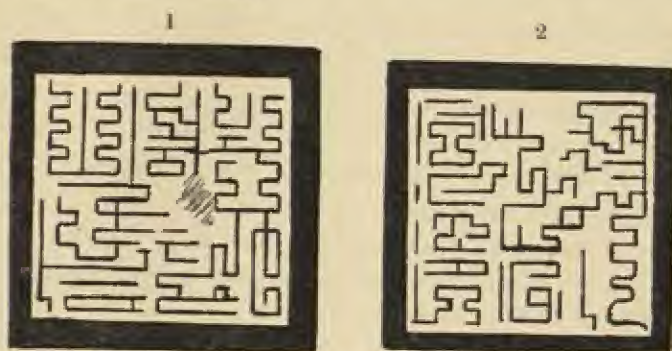
The official seal of the Khyab-ying (ཐབ་འཕིང་ "the Protector of the Spheres"), who is the Prime Minister of the Tashi Lama, is shown in Fig. 10. The inscription in this seal is as follows:—



I am unable to find any meaning for the design on this seal. The bottom character of the left-hand column might be *ku*, but none of the others bears any resemblance to any letter. I have inquired from the Khyab-ying, but have not yet received his reply.

As I have already suggested, the apparently meaningless characters on Tibetan seals may be imitations of characters or symbols from old Mongolian seals. Four examples of such seals are illustrated in Yule's *Travels of Marco Polo*. One of these is on a photograph of a letter of Arghun Khan sent by him to Philip the Fair of France in 1289 A.D., another on a letter sent by Oljaitu to Philip

the Fair in 1305¹; the other two are on a photograph of a bank-note of the Ming Dynasty, which carried on the paper currency of the Mongols.² I give a tracing of the two latter seals below.



Two Seals from a Bank-note of the Ming Dynasty.

The character at the bottom of the left-hand column of the lower seal on the bank-note, which is shown as Fig. 2, is the same as the character at the bottom of the third column of the first seal of the Prime Minister, and the character at the top of the left-hand column of the lower seal on the bank-note (Fig. 2) is the same as the penultimate character in the right-hand column of the seal of the Jong-pöns of Gyantse. None of the other characters correspond with those on the Tibetan seals, but there is a general sort of resemblance between them and some of the characters on the seal of the Khyab-ying.

Besides seals in the Hor-yig seal character some Tibetan seals have the inscription in Tibetan U-cha characters. The seals of the Sera and Gahdan Monasteries are examples. The seal of the Depung Monastery has its inscription in the Hor-yig character.

¹ *Travels of Marco Polo*, translated by Colonel Sir Henry Yule, edited by Henri Cordier, vol. ii, p. 474, 1903. The letter of Arghun Khan bears three impressions of his seal and that of Oljaitu bears five impressions of his seal. The two seals are different.

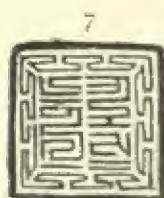
² *Op. cit.*, vol. i, p. 426.

The official seal of the Tashi Lama is shown in Fig. 2. It is known as the *hJa-Sa bKah-tham* (རཨ་ར་ས་བཀ་ཐམ་), "seal of heaven (lit. rainbow) and earth." It is in the Old Indian Lantsa character, and bears a monogram in the centre, and the word *mangalam*, the equivalent in Sanskrit for *Ta-shi* (ཐ་ཤི་). The monogram is made up of the ten letters *o, u, m, h, k, sh, l, w, r, and y*. It is supposed to have mystic power as a charm, and is, in consequence, called *Nam-chu-wang-dan* (ནམ་ཅུ་དབང་པ་ལྔ་), "the ten powerful letters." Illustrations of this and other similar monograms are given by Rai Sarat Chandra Das Bahadur in pl. v of "The Sacred and Ornamental Characters of Tibet" (JASB. 1888, vol. lvii, pt. i, p. 41).

As an example of seals which bear no inscription but only a design the seal of the Tashi Lama's Secretary, which is affixed to the address on the outside of letters which bear the official seal of the Tashi Lama to the letter, is shown in Fig. 4. The design is a conch-shell, which is one of the eight lucky symbols of Buddhism known as *Tashi-ta-gye* (ཐ་ཤི་ཐ་གེ་ རྟེན་སྒྲུབ་བརྒྱུད་ *bkra-shis rtugs-brgyad, aṣṭamangala*). It is the symbol of the preaching of the doctrine; as its sound spreads far and wide.

Another seal which bears no inscription but only a design is that of the Treasurer (ཐུག་སྒྲོལ་པ་) of the Tashi Lama, which is shown in Fig. 5. The design is an emblem of prosperity.

I have not given any examples of seals in which the inscription is in the ordinary Tibetan character. The seals of the Sera and Gahdan Monasteries bear the names of the monastery *sera* and *dgah-lān po-brang* in the U-chañ character, while that of Depung (དཔུང་པོ་ལྔ་ *aBras-spung*) bears the name of the monastery in the seal character. The seals are round, and there is a floral design in the centre of each seal. Illustrations of these three seals, which were affixed to the Tibet Treaty, will be found in



the illustration of the Treaty which is given by Sir F. Younghusband in *India and Tibet*, p. 306. The impressions are, however, indistinct for the purpose of reading the inscriptions. Mr. B. C. Gould, Political Officer in Sikkim, has kindly had these seals photographed for me in their full size.

The inscription on the seal of the Depung Monastery is clear: *hBras-spung*.

The inscriptions on the other seals are, however, too indistinct to be read. That on the Sera seal appears to be *Se* (at the top), *ra* (on the left side), illegible (on the right side), *chhen* (at the bottom).

The inscription on the Gahdan seal appears to be *dGah* at the top; illegible, probably *ldan*, on the right side; *pho* on the left side, and *bra(ng)* at the bottom, viz. *dGah-ldan pho-brang*, the Gahdan Palace.

Although the inscriptions are indistinct, I give the seals below as examples of this class of seal.



Seal of
Depung
Monastery.



Seal of
Sera
Monastery.



Seal of
Gahdan
Monastery.

DESCRIPTION OF THE PLATE

1. Official seal of the Dalai Lama.
2. Official seal of the Tashi Lama.
3. Private seal of the Dalai Lama.
4. Seal of the Secretary of the Tashi Lama.
5. Private seal of the Khyab-ying, which is affixed to letters signed by the Treasurer of the Tashi Lama.
6. Seal of the Tibetan Council of Ministers.
7. Seal of the National Committee (Tshong-du Dūd-pa).
8. Seal of the Lama Minister of the Tibetan Government.
9. Seal of the Jong-pōns of Phari.
10. Official seal of the Khyab-ying, the chief Minister of the Tashi Lama.



II

THE INDO-ARYAN NASALS IN GUJRATI

By R. L. TURNER

1. 1. The following discussion of the treatment of the Indo-Āryan nasals in Gujrātī is based on materials which I have been collecting with a view to a more complete account of the sound changes of the language, but of which circumstances have delayed the publication.

Much that is contained in the older comparative grammars of the modern Indo-Āryan languages is of little value, as at the time of their writing the new ideas of the Junggrammatiker had either not been published or at least had not been appreciated by the writers. The inviolability of sound laws is still a golden principle for a student of linguistic change to hold to, and if he is forced to confess to a violation, he must frankly recognize the fact, investigate it fully, and, if possible, explain it. Any modifications of the original theory have not so much struck at its foundations as multiplied the conditions under which we may expect variation. The importance of this has not, unfortunately, always been realized by more recent writers on the sound changes of the modern Indian languages.¹ They have been too often content with saying that such and such a sound develops in two or more ways in the same language without attempting to specify the conditions of variation. To do something towards such a specification with regard to the nasals, and

¹ Since writing this article I have had the privilege of reading M. J. Bloch's excellent book *La formation de la langue marathe*, which all students of Indian languages in particular and of comparative philology in general will welcome as one of the first scientific attempts to explain the phonetic history of a modern Indian language.

particularly *m*, in Gujrātī I have attempted in the following pages.

1. 2.

Abbreviations

A. Apabhraṃśa.	Mod. Modern.
fr. derived from.	O. Old.
G. Gujrātī.	P. Pañjābī.
H. Hindi.	PI. Primitive Indian
HD. Hēmacandra's Deśi- nāmamālā.	(Urindisch).
IA. Indo-Āryan.	s. having the same meaning.
Idg. Indogermanic.	Ś. Śaurasēni.
L. Lexicographers.	wcl. with compensatory lengthening.
M. Marāṭhī.	* indicates a conjectural form.

Where the language with which the Gujrātī word is compared is not specified, Skt. (Sanskrit) is to be understood.

1. 3. There is good reason to believe that Gujrātī is descended from a dialect of Śaurasēni (a question I hope to discuss at greater length afterwards)¹; possibly the Apabhraṃśa of Hēmacandra forms a link in the chain. But this point still needs investigation (see Sir G. Grierson's notes in the *Linguistic Survey of Gujrātī*).²

1. 4. Primitive Indian as represented by the language of the Veda possessed the following nasals: *ṇ, ñ, ṇ, n, m, ṁ*. Of these *ṇ* and *ñ* are never found independently, but only in connexion with their corresponding stops; *ṇ*, due originally to the presence of an *s*- or *r*-sound, is found neither initially nor finally, but is otherwise independent; *n* and *m* are quite independent and are found in all positions; it is possible that final *-m* was replaced by *-ṁ*.

¹ Dr. Barnett's statement in *Antiquities of India*, p. 34, that G. is descended from Āvanti seems without sufficient foundation. The Āvanti dialect of Ś. has left so few monuments that it is impossible to draw a safe conclusion.

² A difficulty in the way of a close connexion is the different treatment of *-m*. In A. every *-m* tended to become *-ṇ*, e.g. *māṇa*, *caṇara* from *nāma camaraḥ*; G. *nām cāmār* (see 3. 3 ff.). The chief point of connexion is the close resemblance of verbal forms (cf. 5. 1).

although the modern Brāhman pronunciation gives *-m*. The exact value of *m*, found only before sibilants and perhaps finally, is undetermined. That it was something more than a mere nasality of the preceding vowel seems to be shown by the fact that when it becomes such the vowel is lengthened wcl. (see 6. 417) and that the grammarians distinguished between it and the sound they called *anunāsika*, which seems to have been a simple nasality of the accompanying vowel. The modern pronunciation given to *m* seems to me to be that of a nasalized labial spirant *-v-* or *-w-*, e.g. I have heard *siṃhaḥ* as *siṃhah* from a Marāṭhā scholar.

1. 5. Gujrātī possesses the following nasals: *ṇ, v, n, m*, and the nasalization of vowels represented by the mark *-* over the vowel. Of these *ṇ* is found finally as a current pronunciation of final *-ṇg* in pausa and before consonants (see 6. 411), and sometimes I think it appears between a nasalized vowel and a guttural, particularly if the vowel is short, e.g. *agūṭhō* or *āṅgūṭhō*; otherwise it has no independent existence. *v* is formed with the tip of the tongue turned back and striking the palate a trifle further back than for *ṭ*, etc.; the mouth passage does not seem to me to be completely closed during the whole formation of the sound, and it is perhaps a cerebral nasalized spirant rather than a nasal proper; it often imparts a certain amount of nasality to the preceding vowel, in this way resembling the history of the group *ama > aṇa > āva* (see 3. 32). It occurs in all positions except initially. *n* is formed by contact between the tip of the tongue and the roots and inside edge of the upper front teeth; it occurs in all positions. *m* is formed by closure of the lips and is like English *m* except that the lips are held rather more tautly; it is unrestricted in position. Any vowel may be nasalized, and the nasalization, generally equivalent in strength to Jespersen's §2, is coincident with the duration of the vowel.

2. Initial *n-*, *m-*

2. 1. *n-*, Ś. *ṇ-* becomes (Mod. IA. *n-*) G. *n-*: *nār* f. "woman": *nārī* s.; *navō* "new": *navah* s.; *nāthō* "having fled": *naṣṭah* "destroyed"; *nām* n. "name": *nāman-* n. s.; *nās* m. "destruction": *nāśah* s.; *na* "not": *na* s.; *naḷ* m. "pipe": *nalah* "reed"; *nisāsō* m. "groan": *niḥśvāsah* s.; *nāmvā* "to pour": *nāmayati* "to bend"; *nīm* m. "Azadirachta Indica": *nimbah* s.

2. 2. *m-*, Ś. *m-* (Mod. IA. *m-*) remains: *māg* m. "road": *mārgah* s.; *maḷ* m. "dirt": *malam* s.; *mūḷ* n. "root": *mūlam* s.; *mākh* f. "fly": *makṣā* s.; *māthā* n. "head": *mastakam* s.; *mīthō* "sweet": *mṛṣṭah* s.; *mārvā* "to strike": *mārayati* "to kill"; *mājvā* "to clean": *mājyati* s.; *mālō* "mad": *mattah* "intoxicated".

3. Intervocalic *-ṇ-*, *-n-*, *-m-*

3. 1. *-ṇ-*, Ś. *-ṇ-* becomes (M. *ṇ*, H. *n*) G. *-ṇ-*: *khaṇ* n. "moment": *kṣaṇam* s.; *cōṅṇō* "fourfold": *caturguṇah* s.; *ghāṇ* m. "stink": *ghrāṇah* s.; *chāṇ* n. "cowdung": *chagaṇam* s.; *suṇvā* "to hear": *śṛṇōti* s.; *ōkhaṇvā* "to pound": *avakṣaṇōti* s.; *kaṇas* n. "ear of corn": *kaṇīśah* s.; *gharṇī* f. "mistress of the house" fr. **garhiṇikā*: *grhiṇī* s.

3. 2. *-n-*, Ś. *-ṇ-* (M. *ṇ*, H. *n*) becomes G. *-ṇ-* (cf. G.M.P. -ḷ fr. -l-: H. -l-): *māṇas* m. "man": *mānuṣah* s.; *tāṇvā* "to stretch": *tānayati* s.; *dhaṇī* m. "master": *dhanikah* "rich"; *hīṇ* "base, low": *hīnah* s.; *ghaṇō* "many": *ghanah* "thick"; *ūṇō* "not quite filled": *ūnah* "less"; *viṇ* "without": *vinā* s.; *pāṇī* n. "water": *pāṇīyam* s.; *vakhāṇ* n. "story": *vyākhyānam* s.; *āṇṇ* (or *āṇvā*) n. "courtyard": *aṅganam* s.

3. 3. Up to the present it does not seem to have been noticed that in Gujrātī we have a double treatment of PI. intervocalic *-m-* regulated by definite conditions. For example, Sir G. Grierson in his article in the ZDMG,

vol. 1, p. 16, vaguely says: "The Ap. rule (H.C. iv, 397) under which a medial *m* is optionally changed to a nasalised *v*, holds strongly in all the IAV (Indo-āryan vernaculars)." He then puts side by side the forms *nām* and *nāv* fr. *nāma*, but makes no attempt to specify the conditions.¹

Actually Gujrātī is one of the few languages, including Singhalese and the North-West dialects (see Grierson, *Pisācī Languages*, p. 118), which have not uniformly changed *-m-* to *-v-*. The conditions appear to be as follows. The treatment of *-m-* depends on the position of the accent,² i.e. the later penultimate stress of the type
 ' ~, ' ~ ~, ~ ~ ~, ~ ~ ~ ~.

3. 3 1. After the accent *-m-* remains.

3. 3 1 1. Immediately: *jamvā* "to eat", *jamaṇ* n. "meal", H. *jaunār* m. "feast" fr. **jamanakāra* : **jaunār* : *jamati* "to eat"; *cāmar* m. or f. "flyflap": *cāmarah* s., H. *cāwar* m. s. : *camarah* s.; *ugāmvā* "to lift out", H. *ugānā* "to raise" fr. **ugāwnā* : **udgāmayati*, Skt. *udgamayati* "to cause to come up"; *namvā* "to bend" intrans., H. *naunā* s. fr. **naūnā* : *namati* s.; *nāmvā* "to pour", H. *nānā* "to cause to bend" fr. **nāwnā* : *nāmayati* s.; *kamaḷ* m. "lotus", H. *kāwal* m. s. : *kamalah* s.; *bhamrō* m. "bee", H. *bhaūrā* m. s. : *bhramarah* s.; *sāmḷō* "dark", H. *sāwlā* "dark-complexioned" : *śyāmalah* s.; *nām* n. "name", H. *nāw* m. s. : *nāman-* n. s.; *gām* m. "village", H. *gāw* m. s. : *grāmah* s.; *visāmō* m. "rest", M. *visāvā* s. : *visrāmah* s.; *sīm* f. "border", H. *sīw* s. : *sīmā* s.; *taṃ* m. "darkness", H.

¹ M. Bloch, op. cit., p. 141, wrongly says that *-m-* changes to *-v-* in all languages except Singhalese and North-West dialects.

² The same writer, op. cit., pp. 50 ff., ignores any influence of stress accent in the development of the Mod. IA. languages. To do this in the case of G., at least, seems to me impossible. There is little or no stress now, but its effects are evident. It is worth noting that in many words it must have had a different position from any accent postulated to explain Marāṭhī changes.

tāwālā m. "darkness before the eyes, fainting": *lāmas-* n. "darkness"; *damvā* "to tire": *damayati* "to subdue"; *vām* m. or f. "fathom": *vyāmaḥ* s.; *vimal* "clean": *vimalaḥ* s.; *saṃō* m. "time": *saṃayaḥ* s. (if it were a loan-word like H. *samāi*, *samāi*, we should expect **saṃē*); *dhamaṇ* f. "bellows": *dhamaṇī* "pipe"; *lōm* m. "hair of the body": *lōmam* s.; *bhām* f. "angry woman": RV. *bhāmaḥ* "anger"; *dhīmō* "steady": *dhīmant-* "thoughtful".

3. 312. Mediatly: *pācmō* "fifth", H. *pācivā* s. fr. **pañcamakaḥ*; *pañcamah* s.; *sātmō* "seventh", H. *sātwā* s.; *saptamah* s.; *dādām* m. "pomegranate": *dādīmaḥ* s.; *nōm* f. "ninth day": *navamī* f. "ninth".

3. 32. Before the accent -*m-*, Ś. -*m-* becomes the nasalized labial spirant *v̄*: this -*v-* falls together with -*v-* fr. Pl. -*v-*, -*p-*, -*b-*, and the nasalization is transferred to the preceding vowel.

3. 321. *kāvārō* "unmarried", H. *kāvār* s.: *kumārāḥ* "lad"; *śōpvā* "to consign", H. *saṃpnā* fr. **sāvappa-*: *samarpayati* s.; *śōg* m. "disguise", H. *saṃg* m. "imitation"; **samāṅgaḥ* "having the same form"; *śōdhā* m. pl. "a particular fragrant drug", H. *saṃdhā* "sweet-smelling": *saṃagandhaḥ* "a particular perfume made of similar ingredients"; *śōghō* "cheap", M. *saṃg* s.: *samarghaḥ* s.; *pōdvū* "to crush": *pramardati* s.; *śōrō* "passing through" fr. **sumapasarakah*: *apasarati* "to pass away out" (?); *abōḍō* m. "hair dressed in the shape of a mango" fr. **āmramākuṭakaḥ* (*ō* for *ō* by dissimilation with previous *ā*).

3. 322. Similarly in terminations, where the -*m-* is not felt to be a part of the root (in Jespersen's sense), it becomes -*v̄-*: e.g. 1st sing. indefinite pres. *puchā* and 1st pl. fut. *puchīśā* fr. Ś. *pucchāmi*, *pucchissāmō* (see 4. 3), as opposed to *pācmō*, etc., where the -*m-* runs through the paradigm: *pācmō*, *pācmī*, *pācmā*, *pācmā*.

3. 33. When the pre-accentual syllable is long, -*m-*

remains : *jamāi* m. "son-in-law", H. *jāwāi* s., M. *jāvaī* s. fr. **jāmātrkah* : *jāmātar-* s.; *samāṇē* "like" fr. *sāmāna-* (found in compounds) : *samānah* s. (cf. *jōl* f. "twins" fr. **yaugala-* : *yugalam* "pair"; *pōthē* f. "book" fr. **paustikā* : *pustakam* s.; *mōh* n. "face" : *mukham* s.; *mōgrō* m. "jasmine" : *mudgarah* s.; Buddhist Skt. *dāridrah* "poor", Māgadhi *dālidde* s. : *daridrah* s.).

3. 331. *samāvva* "to accommodate", H. *samānā* "to be contained in", M. *sāmāvnē* "to contain", cannot be explained as from *samāpayati* "to bring to an end". To suppose a shifting of accent to the first syllable, thus protecting the -m- from change, would necessitate a form **samavvū*; and in any case in H. and M. the -m- would become -v-. The Skt. *sāmyati* "to finish, settle" gives as good a sense, and satisfactorily explains the -m-. *sāmyati* becomes **sāmē* (inf. **sāmvā*), from which a passive *samāvū* (= H. *samānā*) and a causative *samāvva* (= M. *sāmāvnē*) are formed. Similarly, *gamāvva* is formed from **gāmvā* : *gāmayati* (cf. *ugāmvā* fr. **udgāmayati*).

3. 332. *gosāi* m. "ascetic", H. *gosāi* : *gōsvāmin-* s., *ghaū* n. "wheat", H. *gēhū*, M. *gahū* s. : *gōdhūmah* s., *kādav* m. "mud", H. *kādaū*, *kādaū* m. "slime" : *kardamah* s. are loan-words. For the loss of the nasalization in the last see 6, 42.

4. Final -m, -n

4. The development of final nasalized syllables in Gujrātī, including those treated of in 5, depends upon the nature of the preceding vowel. With the low vowels *ā* and *u* nasalization is retained; with the high vowel *ē* the raising of the back of the tongue, causing a raising of the back of the velum also, leads to its loss. *ī* : A. -*iā*, Ś. -*iam*, Skt. -*ikam*, -*itam*, is probably later in its origin than the loss of *ī* in *ē*.

4. 1. Final -m.

4. 1 1. *-ām*, *-īm*, *-ūm*, Ś. *-am*, *-im*, *-um* disappear in G. when preceded by a consonant preserved into the Ś. period: 1st sing. fut. *karīs* "I will do": Ś. *karissam*; acc. sing. *kān* m. "ear": *karṇam*; *jīb* f. "tongue": *jīhvām*; *āg* f. "fire": *agnim*; *dhamaṇ* f.: *dhamanīm*; *kāg* m. "a kind of corn": *kaṅgum* s.

4. 1 2. Where *-am* is preceded by a Ś. vowel, the two are contracted in G.

4. 1 2 1. *-akam*, Ś. *.aam*, A. *-aū* becomes G. *-ā*: nom. acc. n. sing. *-ā* fr. *-akam*, e.g. *āgnū* fr. **aṅganakam*: *aṅganam*. It should be noted here that the acc. sing. of masc. words in *-ō* (fr. *akah*) is *-ō*, not *-ū* (fr. *-akam*) on the analogy: *kān* (fr. *karṇah*): *kān* (fr. *karṇam*); *ghōḍō* (fr. *ghōṭakah*): *ghōḍō* (for **ghōḍū* fr. *ghōṭakam*).

4. 1 2 2. *-ikam*, *-itam*, Ś. *-iam* A. *-iū* become G. *-ī*: *dahī* n. "curds" fr. **dadhikam*: *dādhi* n. s. (but see 5. 2 3); *mahlī* n. "curds": *mathita* "churned". It must be noted that when preceded by a nasal this *-ī* becomes *-ī̃*: m. *pānī* n. "water": *pānīyam* s.¹

4. 2. It is possible that there is a trace of final *-n* in the nasalization of the adverbs of place *tyā*, *jyā*, etc.: cf. *tasmin*.

5. Final *-āmi*, *-āmaḥ*, *-āni*, *-ēna*, *-īni*

5. If the accent of the penultimate stress scheme fell on the termination, it was shifted to the root syllable on the analogy of a majority of connected forms and for the sake of sense protection: e.g. *pūcchantaō* fr. *pucchāntaō* after *pūcchasi*, *pūcchai*, *pūcchaha*, *pūccha*, *pūcchan*, *pūcchia*, *pucchium*, *pūcchiō*, etc., so also *pūcchāmi* fr. *pucchāmi* (cf. A. *pucchami*, *pucchimi*), etc. Add to this the growth of other means to replace the ideas conveyed by inflection, with the consequent loss of distinct pronunciation of inflections no longer necessary for intelligibility (see

¹ M. Bloch gives the same form for M., but says that it is a matter only of writing, not of speech. The G. seems to me to be simply *pānī*.

Jespersen, *Growth of Language, passim*), and it will be seen that the final inflectional syllables came to be pronounced without much stress.¹ This seems to accord with the linguistic history of Gujrāṭī. For the treatment of the nasals in these syllables differs from that of those in the body of the word. We have already in 4 seen that final *-m* and *-n* are treated differently from medial *-m-*, *-n-*, becoming a mere nasalization, which under certain circumstances is lost with the vowel it nasalizes. We have now to deal with cases where *m* and *n* are not final, but are followed by a vowel.

5. 1 1. 1st sing. pres. *āmi-*, Ś. *-āmi*, A. *-ami*, *-imi* becomes G. *-ā*, through **āṽ(i)*. If this is so, Pischel (§ 454) is wrong in deriving A. *vaṭṭā* from **vartakam* (after the grammarians' form *pacakati* = *pacati*) with the secondary ending as in the Ś. fut. *karissam*. Rather it is from *vaṭṭāmi*, *vaṭṭami*, in which *-m-* became *-ṛ-* and *-i* was dropped (for A. *-ṛ-* fr. *-m-* see Pischel, § 251, Bloch, op. cit., § 67, above 3. 3 2). The A. paradigm thus becomes clearer :—

pucchaṃ, G. *puchṇ*, fr. *prcchāmi*.

pucchasi fr. *prchasi*.

(*pucchahi*, G. *puchē*, has *-h-* after 2nd pl.).

pucchai, G. *puchē* fr. *prcchati*.

pucchahā for **pucchaṃ* (after 2nd pl., and with desire to distinguish it from 1st sing.) fr. *prcchāmah*.

pucchahu, G. *puchō*, fr. **prcchatha(h)*.

pucchahi, G. *puchē*, for **pucchamti* after the analogy *pucchaṃ* : *pucchahā* : *pucchai* : *pucchahi*.

5. 1 2. Similarly, 1st pl. *-āmaḥ* (*-āma*), Ś. *-āmō* becomes G. *-ā* in the 1st pl. fut., e.g. *karīṣā* fr. Ś. *karissāmō*, Skt. *karisyāmaḥ*.

5. 2. In *-āni*, *-ēna* (and perhaps *īni*) *-n-* becomes *-*.

¹ My views have undergone some changes since my last note in the JRAS.

5. 2 1. n.pl. *-āni*, Ś. *-āiṃ*, *-āṇiṃ* becomes G. *-ā*,¹ e.g. *chōkrā* pl. : *chōkrā* n. "child"; *pākā* n.pl. : *pākā* "ripe", etc., cf. M. n.pl. *-ā*. In H. it becomes *-ē*, where it serves as the m.pl., as the n. has been lost, e.g. *ghōrē* pl. : *ghōrā* sing. "horse". But besides *-āiṃ* there is also found in Prākṛit the form *-āṇi*. Did these two forms exist side by side at the same time in the same language? It is possible, perhaps most probable, that *-āṇi* represents only a conservatism of writing, and that both symbols were uniformly spoken as *-āiṃ*. It may, however, be that the two forms were current together. Jespersen, *Progress in Language*, p. 55, speaking of the shortening of frequently repeated words, says: "Wherever a person is often spoken of, the speaker is understood by everybody before he is half through the name, if it is rather a long one, and therefore he often does not take the trouble to pronounce the latter part of it. He thus exemplifies the principle we meet with everywhere: people do not pronounce distinctly unless they feel that distinctness is necessary if they are to be understood; whatever is easily understood from the context or from the situation is either slurred over or left out completely." Just as in English we have a multiplicity of doublets due to difference in distinctness of utterance, e.g. [kju, ɣkju, ʔæŋkju] = *thank you*, [jes] or simply a nasal vowel with the lips closed = *yes*, so perhaps one is justified in imagining that when a string of words came together all having the same inflection, e.g. *savvāṇi imāṇi pakkāṇi phalāṇi*, there was a tendency to pronounce one distinctly and to slur over the rest, producing something like *savvāṇi imāiṃ pakkāiṃ phalāiṃ*.

5. 2 2. Inst. sing. *-ēna*, Ś. *-ēṇa*, A. *-ēṇ*, *-ē* becomes G. *-ē* (M. *-ē*): e.g. *dūdḥē* inst. sing. : *dūdḥ* n. "milk". It has been extended to all nouns of whatsoever origin, e.g. *chōkrīē* : *chōkrī* f. "girl".

¹ Only found in *-āka* stems, i.e. where G. sing. is *-ā*; *-a-* stems (e.g. *ghar* n. "house") have pl. in *-ā*.

5. 23. n. pl. -īni is perhaps to be found in G. *dahī* fr. *dadhīni*. The Pkt. form *dahīm* points to this derivation rather than **dadhikam* (see 4. 2), which would give Pkt. *dahiam*, while *dadhī* would be represented in Pkt. by **dahīm* (cf. Pkt. *vāriṃ* : Skt. *vāri*).

5. 24. It should be noted that this change affects -n- only when it forms part of an inflection, and does not touch any other unaccented -n-, if it forms part of the root: e.g. *mākaṇ* m. "bug", *vēraṇ* f. "angry woman", *kākaṇ* n. "bracelet"; *matkun-aḥ*, *matkun-am*, *matkun-āḥ*, etc., *vairiṇ-ī*, *vairiṇ-īm*, *vairiṇ-yaḥ*, etc., *kaṇkanam*, *kaṇkan-āni*, etc.

6. Consonant groups containing a nasal

6. All consonant groups are simplified in G. with compensatory lengthening of the previous vowel. If this vowel is preaccentual, it appears as short in Mod. G., while accented *ā*, *ī* before a Mod. G. consonant group become *u*, *i* (and perhaps in all words of more than one syllable).

6. 1. Stop + nasal.

6. 11. In the group guttural + n the n is assimilated. *ku*: *mukāvva* "to separate" fr. **mukna-*, Ś. *mukkō* : *muktaḥ*; *sākvā* "to be able", Ś. *sakkadī* : *saknōti* s.

gn: *nāgō* "naked": Ś. *naggō*, Skt. *nagnaḥ* s.; *āg* f. "fire": Ś. *aggī*, Skt. *agniḥ* m. s.; *bhāgō* "broken": *bhagnaḥ* s.

6. 12. In the group *jñ* the *j* is assimilated, giving *ññ*, Ś. *ṇṇ*, O.G. *nn*, *nh*, G. *n* wel., or initially *n-*: *rānī* f. "queen": Ś. *raṇṇī*, Skt. *rājñī* s.; *janōi* f. "sacrificial cord": *yajñōpavitam* s.; *vinavvā* "to solicit": Ś. *viñṇavēdi*, Skt. *viññapayati* s.; *ān* f. "command": Ś. *aṇṇā*, Skt. *ājñā*: *nāvvā* "to try": *jñānam* "knowledge".

6. 13. The groups *tm*, *pn* result in a "compromisslaut" and become Ś. *pp* (*tt* ?), *mm* (?), G. *p*, *m* wel.

6. 131. *tm*: *āp* "you" (polite form): Ś. *appa-*, Skt. *ātma* nom. sing. "self".

6. 1 3 2. *pn*: *pamvā* "to get": *prāpnōti* s. Sir G. Grierson's derivation (Phon. ii, p. 17) of *pām-* from *prāp-* (*prāpayati* ?) does not seem to me satisfactory, despite *kamād* m. "flap of a door": *kapāṣaḥ* s. (is this *m* due to contamination with some other word ?).¹ *āpayati* "to get" becomes G. *āvṛā* "to come to". *sāmnā* n. "dream": *svapnam* s. This is probably a contaminated doublet form fr. **sāmā* fr. **svapnakam* and **siṃvā* fr. Ś. *siṃṇam*.
 • PI. **supina-*, Idg. **supono-* (cf. Gk. *ὑπνος* fr. **ὑπαρος*).

6. 2. A long nasal is shortened wel.: *ṇṇ* becomes *n* wel. An intermediate stage between *ṇṇ* and *n* is marked in O.G. (and in O. Western Rājasthānī, see JRAS. July, 1913) by *nh*. Cf. Tulsī Dās *dīnh*: Pkt. *dīṇṇō* "having been given". What is the phonetic or physiological explanation of this symbol is unclear. At least it was not identical with *nh* fr. *sn*, *ṣn*, *śn*, where *h* is still sometimes heard.

6. 2 1. *ṇṇ*: there is no certain example of this; the derivation of *khūn* f. "murder" fr. *kṣuṇṇaḥ* "pulverized" in face of the Persian *khūn* "blood" is almost certainly wrong. But cf. *n* fr. *ṇṇ* fr. *ṛṇ*, and fr. *ṇṇ* fr. *ññ* fr. *jñ* and *ny*.

6. 2 2. *nn*, Ś. *ṇṇ*: *chānō* "concealed": *channaḥ* s.; *ān* n. "corn": *annam* "food"; *bhīnō* "wet": *bhinnaḥ* "split, disintegrated (*as by water)"; *kinrī* f. "fiddle": *kinnarī* "divine musician"; *anāj* n. "corn": *annādyam* "food".

6. 2 3. *mm*: *samārvā* "to kill" fr. **sammārayati*; *sāmō* "opposite": *sammukhaḥ* s.; *dām* m. "money": *drammaḥ* "a coin", borrowed fr. Gk. *δραχμή*.

6. 3. In the groups semi-vowel + nasal and nasal + semi-vowel, the semi-vowel is assimilated, except in the groups *mr*, *ml* where a *b* is developed between the two sounds, when intervocalic.

¹ M. Bloch (§ 137) follows Grierson, and suggests a feeling of linguistic equivalence between *m* and *v* as the cause. This, however, would seem to be wrong in the light of the history of *-m-* in G.

6. 3 1. Semi-vowel + nasal.

6. 3 1 1. *ṛṇ* : *kān* m. "ear" : Ś. *kaṇṇō*, Skt. *kaṇṇaḥ* s. *pān* m. "a roll of betel leaf with areca, lime, etc." : *parṇaḥ* "leaf" ; *ṣṇā* n. "gold" : Ś. *śoṇaṇṇam*, Skt. *sauvarṇam* s. ; *ūn* n. "wool" : *ūrṇam* s. ; *jūnō* "old" : *jūrṇaḥ* s. ; *vān* m. "colour" : *varṇaḥ* s. ; *cunārō* m. "lime-burner" : *cārṇakāraḥ* s. ; *cān* n. "lime" : *cārṇam* s. ; *jīnō* "thin" : *jīrṇaḥ* "worn".

6. 3 1 2. *ṛm* : *cām* *cāmdā* n. "leather" : Ś. *cammaṇ*, Skt. *carmaṇ-* n. s. ; *camār* m. "cobbler" : *carmakāraḥ* s. ; *kām* n. "business" : Ś. *kammaṇ*, Skt. *karmaṇ-* n. s. ; *ghām* m. "sweat" : *gharmaḥ* "hot" ; *comās* n. "monsoon" : *caturmāsam* s. ; *bhām* n. "tax on leather" : *bharman* "wages" ; *kēvaḍdhām* n. "total absolution" : *dharmā* m. or n. "right" ; *dhāmaṇ* f. "snake" : *dharmāṇaḥ* s. ; *kāmaṇ* m. "witchcraft" : *kārmaṇam* s.

6. 3 1 3. *lm* : *kāmas* f. "sugar-cane juice" : *kaḷmaṣam* "dregs" ; *gumḍā* n. "boil" : *gulma-* m. or n. "clump".

6. 3 2. Nasal + semi-vowel.

6. 3 2 1. *ṇy*, Ś. *ṇṇ* : *pān* n. "virtue" : *puṇyam* s. ; *rān* n. "wilderness" : *araṇyam* "forest".

6. 3 2 2. *ny*, Ś. *ṇṇ* : *sānō* "solitary" : *śānyaḥ* "empty" ; *dhān* n. "corn" : *dhānyam* s. ; *mānvā* "to obey" : *manyatē* "to honour" ; *ān*¹ "another" : *anyaḥ* s. ; *nākhvā* "to throw down" : *nyakṣaḥ* "low".

6. 3 2 3. *my*, Ś. *mm* : *śamāvā* "to be mitigated" : *śamyatī* "to come to an end" ; *ghumvā* "to consider, to resound" : HD. *ghummai* "to roll" fr. **ghumyatī* : *ghumaghumāyatē* "to resound".

6. 3 3. *mr*, *ml* become *-mbr-*, *-mbl-*. Ś. *mb*, G. nasalized long vowel + *b* ; finally, long vowel + *m* ; initial *mr-* becomes *m-*.

6. 3 3 1. *mr* : *mākhaṇ* n. "butter" : *mrakṣaṇam* "oil" ; *ābō* m. "mango" : Ś. *ambaṇ*, Skt. *āmraṇ* s. ;

¹ There is a doublet *āṇ* : cf. M. *āṇi* "and". M. Bloch (§ 135) suggests an Idg. difference of form.

tābū n. "copper" : *tāmram* s. ; *ām* f. "mango fruit" : *āmram* s.

6. 332. *mī* : *ābāvū* "to have the teeth set on edge" : *āmlam* "sourness".

6. 4. In the group, nasal + stop or sibilant, the nasal is lost and the preceding vowel lengthened and nasalized. In the preaccentual syllable this vowel is shortened, and in the postaccentual shortened and denasalized.

6. 41. Accented and preaccentual syllable.

6. 411. *āk* : *ākāī* f. "hook" : *añkah* s. ; *kākan* n. "bracelet" : *kañkanam* s. ; *rāk* "humble" : *rañkah* "beggar".

ākh : *sākhā* m. "chain" : *śrañkhalā* s.

āṅ : *āṅ* n. "limb" : *aṅgam* s. ; *āṅlī* f. "finger" : *aṅgulī* s. ; *bhāgvā* "to be broken" fr. **bhaṅgyatē* ; *pāṅlō* "lame" : *paṅgulā* s. ; *śāṅ* n. "horn" : *śraṅgam* s. ; *āṅvā* : *aṅganam* ; *kāṅ* : *kaṅguḥ* ; *rāṅdō* "walking slowly" : *raṅgatī* "to move to and fro" ; *āṅvāthō* m. "thumb" : *aṅguṣṭhā* s. ; *bhāṅrō* m. "wasp" : *bhāṅgaḥ* "bee" ; *āṅrō* m. "ember" : *aṅṅarakāḥ* s. Final long nasalized vowel + *g* often appears as long vowel + *ṅ* (cf. long vowel + *m* fr. long nasalized vowel + *b*, above 6. 33 and below 6. 415). I have heard it so at the end of a sentence and before words beginning with a consonant, but never before vowels.

āṅh : *jāṅh* f. "thigh" : *jaṅghā* s. ; *lāṅhvā* "to fast" : *lāṅhvā* n. "fasting" : *laṅghatī* *laṅghanam* s.

6. 412. *āc* : *pāc* "5" : *pañca* s. ; *cāc* f. "beak" : *cañcuḥ* f. s. ; *kācī* f. "sleeved coat" : *kañcukī* s. ; *lāc* f. "bribe" : *lañcā* s. ; *kūcī* f. "key" : *kuñcīkā* s. ; *ācaḥ* m. "teat" : *añcalāḥ* "the hem of a skirt".

āj : *mājar* n. "cluster of blossoms" : *mañjaram* s. ; *ājvā* f. "stye in the eye" : *añjanam* "eye ointment" ; *ājvā* "to paint the eyes with collyrium" : *añjayatī* "to anoint" ; *pājrā* n. "prisoner's bar" : *pañjaram* "cage" ; *bhājvā* "to break" fr. **bhañjati* ; *lājō* m. "dispute" :

lañjati "to blame"; *pījvā* "to card cotton": *piñjā* "cotton"; *pūjō* m. "rubbish"; *puñjak* "heap"; *mājīth* f. "Bengal madder": *mañjiṣṭhā* s.

6. 413. *ṇṭ*: *kātō* m. "thorn": *kaṇṭakak* s.; *vātō* m. "share": *vaṇṭak* s.; *ghātī* f. "ankle joint": *ghuṇṭakak* s.; *cātva* "to pluck": *cunṭati* "to cut off" (fr. **erṇtati*: *kṛṇtati* ?); *lātva* "to plunder": *luṇṭati* "to rob".

ṇṭh: *sūth* f. "ginger": *suṇṭhih* f. s.; *cāthvā* "to turn and toss over": *cunṭhayati* "to hurt"; *lāthō* "violent": *luṇṭhati* "to agitate"; *kāthāl* "maritime": *kaṇṭhālak* "boat"; *kāthō* m. "shore": *kaṇṭhakak* "neck, *top of a jar, *edge" (cf. *kāthāl*).

ṇḍ: *dāḍī* f. "clothes-stick": *daṇḍikā* "stick"; *khāḍvā* "to pound": *khaṇḍatē* "to break"; *āḍ* m. "testicle": *aṇḍak* "egg"; *māḍvā* "to dispose": *maṇḍatē* "to decorate"; *tāḍlā* m.pl. "grains": *taṇḍulam* "grain"; *bhāḍ* "obscene": *bhaṇḍak* "buffoon"; *rāḍ* f. "widow": *raṇḍā* s.; *māḍvō* m. "booth": *maṇḍapak* s.; *Cāḍāl*: *Caṇḍālak*.

6. 414. *ṇt*: *dāt* m. "tooth": *dantak* s.; *kāt* "beloved": *kāntak* s.; *sāt* m. "saint": *śrāntak* "at peace"; *ātarḍī* f. "entrails"; *ātrō* m. "division": *antarak* "inside, of different form"; *vātarvā* "to cut through": *vyantaram* "difference"; *tāt* f. "thread": *tantuh* m. s.; *sātvā* "to be finished": *sāntak* "appeased".

ṇth: *gāth* f. "knot": *granthak* s.

ṇḍ: *kāḍō* m. "onion": *kandak* "a bulbous root"; *phāḍō* "deceit": *spandak* "rapid motion, *fickleness"; *cāḍ* m. "moon": *candrak* s.; *khāḍvā* "to trample on", fr. **kṣundati*: *kṣuṇṭti* s.

ṇdh: *ādhī* f. "dust-storm": *andhikā* "night"; *khādh* f. "shoulder": *skandhak* s.; *gādhī* m. "druggist": *gandhikak* s.; *bādh* m. "dam": *bandhak* s.; *sādh* f. "joint": *sandhih* f. "connexion"; *rādhvā* "to block up": *rundhati* "to hinder"; *sōjh* f. "evening": *sandhyā* "twilight"; *vōjh* "barren": *vandhyak* s.

6. 415. *mp* : *kāp* f. "shivering" : *kampah* s.; *cāpā* n. "jack-fruit" : *campakah* s.; *lipvā* "to smear", *lipvā* n. "smearing with cowdung" : *limpati*, *limpanam* s.

mb : *lābō* "tall" : *lambah* s.; *kāblō* m. "blanket" : *kambalah* s.; *jābā* f. "rose-apple" : *jāmbūh* s.; *ābī* f. "ear of corn" : *umbikā* "fried stalks of wheat". Finally this nasalized long vowel + *b* becomes long vowel + *m* : *sām* f. "head of a pestle" fr. *sāb sambō sambah* s. (cf. *sābēl* f. "iron nail at the end of the yoke"); *lām* f. "bunch of fruit" : HD, *lumbī* "bunch". This is probably a sandhi change (cf. *-ñ* fr. *-ṇg*, see 6. 411) originally only taking place before consonants and at the end of a word group. Hence we find the doublet *sām* and *sāb* "from ring fixed at the end of a stick", both from *sambah*.

mbh : *kūbh* m. "pot", *kābhār* m. "potter" : *kumbhah*, *kumbhakārah* s.; *lābhā* n. "lottery" : *lambhah* "obtaining"; *sābharvā* "to collect" : *sambharati* s.; *gābhār* "grave" : *gambhārah* "deep-sounding", *khām* m. "pillar" : *skambhah* (also *khābh* m. s.) rests probably on the form **khāb*.

6. 416. *hm* becomes *mh*, *mbh*, which falls together with PL *mbh* : *abābh* n. "violation of celibacy" fr. **abrahma-* (cf. *abrahmacaryam* with the same meaning), with change of accent to the first syllable.

6. 417. *ṃś*, *ṃs* : *vās* m. "bamboo" : *vaṃśah* s.; *sāsō* m. "doubt" : *saṃśayah* s.; *pāsro* "tall" : *prāṃśuh* s.; *kāsā* n.pl. "cymbals" : *kāṃsyam* "bell-metal".

6. 42. In post-accentual syllables (due to secondary accent changes, see 5) the vowel loses its nasality. Present participle *-tō* fr. *-atō* **-antakah*, e.g. *puchtō* fr. **pr̥cchantakah* : *pr̥cchant-*, etc. The accent was shifted from *-ant-* (which would have given **puchātō*) to the root syllable. *pacās* "50" fr. **pācās*, *pañcāsāt* after *ēkpacās* "51", etc. *kāday* m. "mud" fr. **kādaṇ*, a loan-word (cf. H. *kādan*).

6. 5. The normal development of sibilant + nasal seems to be to nasal + *h*: the *h* falls together with Pl. *h* and Pkt. *h*, and is liable to disappear, particularly in uneducated speech. The treatment of sibilant + *m* is uncertain (see 6. 5 2).

6. 5 1. *ṣṇ*, *sn*, Ś. *ṇh*, G. *nh* or *n*, before which a short vowel appears to be lengthened, when *h* is dropped.

6. 5 1 1. *ṣṇ*: *unhō* or *ūnō* "hot": *uṣṇaḥ* s.; *un(h)āḷō* m. "hot season": *uṣṇakāḷaḥ* s.

6. 5 1 2. *sn*: *nhāvā* or *nāhvā* "to bathe", *nāhvā* n. "ceremonial bath"; *snāti*, *snānam* s.; *nēh* m. "love" fr. **nhēhu*: *snēhaḥ* s.; *pānō* m. "flow of milk into the udder": *prasnavaḥ* "flow".

6. 5 2. The examples of Pl. *śm*, *ṣm*, *sm* in G. are not numerous enough to provide a sure description of their history. In the Pkt. dialects (see Pischel, pp. 215 ff.) *śn*, *ṣṇ*, *sn*, except when an anaptyctic vowel was developed between the sibilant and nasal, seem universally to have become *ṇh*. But for *śm*, *ṣm*, *sm*, although most examples show *mh*, there are traces of two other developments: (1) *ss*, e.g. Ś. *Mahissadī* fr. *Mahiṣmatī*, Mg. *ēdaṣṣiṇ* fr. *ētasmin* (but *-sma* always becomes *-mha*); (2) *pph*, e.g. *bhippha-* fr. *bhīṣma-*, *seppha-* fr. *śleṣma-* (as well as *silimha-*, *sembha-*).

6. 5 2 1. Corresponding to these in G. we find *rās* f. "reins": *raśmīḥ* f. s.; and *ūph* f. "warmth": *uṣman-* m. "heat" (nom. sing. *uṣmā*, i.e. feminine in form). Supposing *mh* fr. *sm* to be voiceless, then the development to *mph* is parallel with that of *mh* (voiced fr. Pl. *hm*) to *mbh* (see 6. 4 1 6).

6. 5 2 2. Of *m* fr. *mh* (fr. *sm*) we have examples only in two unaccented words: *lamē* "you": RV. *yusmē* (with *t-* after the singular, and *-a-* perhaps fr. *amē* "we"); *amē* "we": RV. *asmē* s. The retention of the final *ē* is due in both cases to the monosyllabic forms of the sing. *mē* *tē*.

7. The origin of the present Gujrātī scheme of nasals as far as tadbhava words are concerned is, then, as follows :—

$m <$	m - 2. 2	$\eta <$	η 3. 1
	- m - 3. 31, 3. 33		- n - 3. 2
	pn 6. 132		
	mm 6. 23	$\dot{n} <$	$\dot{n}g$ 6. 411
	rm 6. 312		
	lm 6. 313	$- <$	- m - 3. 32
	my 6. 323		- m 4. 12
	mr 6. 331		- n 4. 2
	ṣm 6. 523		- $\dot{a}mi$ 5. 11
	sm 6. 522		- $\dot{a}ma$ 5. 12
	mb 6. 415		- $\dot{a}ni$ 5. 21
$n <$	n - 2. 1		- $\dot{e}na$ 5. 22
	$jñ$ 6. 12		- $iñi$ 5. 23
	$\eta\eta$ 6. 21		nasal + stop 6. 4
	nn 6. 22		hm 6. 416
	rp 6. 311		nasal + sibilant 6. 4
	$\eta\eta$ 6. 321		ṣm 6. 52
	ηy 6. 322		mr 6. 331
	ṣp 6. 511		ml 6. 332
	sn 6. 512		

III

NOTES ON DR. LIONEL GILES' ARTICLE ON "TUN HUANG LU"¹

By SUH HU

FOR the sake of clearness I have grouped my discussions under four separate headings, namely: (I) Punctuations, (II) Misreadings of the Chinese Text, (III) Errors in the Text itself, and (IV) Other discussions.

I. *Punctuations*

It appears to me that Dr. Giles had great difficulty in punctuating the Chinese MS. As he has pointed out in his article (p. 704), the punctuation is omitted in nearly all Chinese MSS., and it is only natural that a foreign reader should find it not easy to supply. I submit my opinion on the following passages:—

1. Page 7, cols. 1-2 of the text (p. 726 of the Journal)—

Dr. Giles' reading

有 而 古
甘 祠 號
泉 焉 鳴
近 神
南 沙。

My reading

有 而 古
甘 祠 號
泉 焉 鳴
近 神
南 沙。

The English version: "The ancients called it Sounding Sand. They deified (or, wondered at, 神) the sand and worshipped (祠) it there (焉). Near by to the south is Kan-ch'üan."

Note.—The word 神 is here used as a verb. Dr. Giles' reading 而 祠 焉 近 is an impossible combination. 近 (near by) should go with the next sentence.

¹ JRAS. 1914, Pt. III, pp. 703-28.

2. P. 10, cols. 4-6—

Dr. Giles' reading

手 生
而 離
沒 兒
神 女
龍 爲
中 神
刺 所
史 錄 父
張 歡 母
孝 然 雖
嵩 携 苦

My reading

手 生
而 離
沒 兒
神 女
龍 爲
中 神
刺 所
史 錄 父
張 歡 母
孝 然 雖
嵩 携 苦

"Although the parents were distressed at thus 'parting alive', the boy and the girl, having been chosen by the spirit, cheerfully took each other's hand and drowned themselves. In the *Shên-lung* period (A.D. 705-6) the Governor Chang Hsiao-sung," etc. (Cf. Dr. Giles' version on p. 719.)

Note.—生 離 ("parting alive") is a very common expression meaning "parting of persons with no hope to see each other again". It is often used together with 死 別 or "parting at death". 兒 女 is the subject of the second clause. 神 龍 is the name of the first two years of the Emperor 中 宗 after his restoration to the throne. Evidently a few years must have elapsed between Chang's appointment to the governorship and his killing of the demon. The latter event occurred in the reign of 玄 宗.

3. P. 11, col. 3—

Dr. Giles' reading

化 曰。
爲 願
一 見
龍。 本
身。
欲
親
享
神。
乃

My reading

化 曰。
爲 願
一 見
龍。 本
身。
欲
親
享。
神
乃

Note.—神 is the subject of the verb 化, not the object of the verb 享.

4. P. 12, col. 1—

Dr. Giles' reading

氏 勅
編 號
在 龍
簡 舌。
書。 張

My reading

氏。 勅
編 號
在 龍
簡 舌
書。 張

"(And) decreed that he should receive the title of *Lung-shē Chang* (*Chang* of the Dragon-tongue). This is recorded in the official records."

Note.—簡 書 always means official records. The last sentence, 編 在 簡 書, concludes and authenticates the whole story.

5. P. 12, cols. 2-3—

Dr. Giles' reading

小 郡
堡。 城
西
北
一
里。
有
寺。
古
木。
陰
森
中
有

My reading

小 郡
堡。 城
西
北
一
里。
有
寺。
古
木
陰
森
中。
有

"One *li* north-west of the city there is a monastery. Shaded among the old trees is a small fort."

Note.—This error of Dr. Giles' is almost unpardonable, as the passage is so evident.

II. *Misreadings of the Chinese Text*

1. P. 1, col. 5—

次 should read 以 (with), not 次. Dr. Giles' English translation, however, is correct on this point.

2. P. 7, col. 4—

液 should read 沃 (to water), not 液. Cf. p. 11, col. 2, where the characters 蛟怪 should read 妖怪 (which is a very common compound for "demons").

Note.—The writer, or, perhaps more correctly speaking, the copyist, had a fanciful way of writing such characters as 天 and 天; cf. the character 猷 on p. 13, col. 2.

3. P. 11, col. 2—

害 should read 害 (to damage), not 客.

III. *Errors in the Text itself*

1. P. 10, col. 2: 人傳頗有虛.

虛 should read 靈.

2. P. 14, col. 4—

The character which Dr. Giles left blank is no word at all. The copyist, it seems to me, wrote 量, and by mistake added two superfluous strokes at the bottom. So he crossed it out by the sign 扌 and wrote another 量.

IV. *Other discussions*

1. P. 2, col. 1—

The "walking radical" 𠂔 has not been omitted here. Dr. Giles failed to recognize the "grassy" or cursive form of 遂.

2. P. 6, col. 1—

Dr. Giles made a very hazardous statement when he determined the date of the manuscript on the ground that a stroke or two appeared to have been purposely omitted in the character 純. I disagree with his supposition for the following reasons:—

First, no stroke has been omitted in this character 純.

Secondly, strokes have been omitted in many other words. The copyist, being evidently an unlearned man, was very free in omitting strokes. The most apparent omissions are, for example, 昌 on p. 7, col. 3; 害 on p. 11, col. 2; 鳥 on p. 13, cols. 4 and 5. Shall we also deduce dates from these seemingly intentional omissions?

IV

THE TUN HUANG LU RE-TRANSLATED

By LIONEL GILES

I FEEL very grateful to Mr. Suh Hu for having read my article with such care, and for having pointed out some undoubted mistakes. Unfortunately, there are others that have escaped him, but which have been brought to my notice by my father, Professor Herbert A. Giles, and other scholars, to whom I also tender hearty thanks. In the light of these corrections it seems desirable that a revised translation of the whole text should now be published.

* * * * *

The town of Hsiao-ku [Toil-for-corn] was originally Page 1.
Yü-tsê [Fishing-pool]. In the time of Hsiao [Wu] Tî of the Han dynasty Ts'ui Pu-i taught the people to labour in the fields and grow corn, whence the name. Later on it was made a district city (*hsien*).

The Êrh-shih spring is three days' journey eastward from the town of Sha-chou. In the Han period Li Kuang-li's army when on the march was suffering greatly from thirst. Having prayed to the spirit of the mountain, he pricked the mountain-side with his sword, whereupon a stream of water gushed out and flowed away to the west for several tens of *li* into the Huang-ts'ao [Yellow Grass] Lake. At a later date there was a general who Page 2.
drank of the water when he was very thirsty, which caused him to fall dead beside the spring. In consequence of this the water ceased to flow, only rising up to the level of the ground. Ever afterwards, when many people came to drink, the flow of water was abundant; when few came the supply was scanty; if there was a great

multitude from the city, which consumed large quantities, the water poured forth in a tumultuous stream; and these phenomena continue down to the present day.

Page 3.

The Êrh-shih temple, which stood by the roadside, has long been in ruins. Stones from it have been piled up together,¹ and to this spot travellers come with their camels and horses in order to pray for good luck. Going east, you pass into the territory of Kua-chou.

South of the city of Sha-chou, at a distance of 25 *li*, are the Mo-kao caves. The way thither takes you through a stony desert with undulating ground, and when you reach your destination there is a sharp descent into a valley. To the east of this point stands the San-wei Mountain, to the west the Hill of Sounding Sand. In between there is a stream flowing from the south, called the Tang-ch'uan [Tunnel-spring].

Page 4.

In this valley there is a vast number of old Buddhist temples and priests' quarters; there are also some huge bells. At both ends of the valley, north and south, stand temples to the Rulers of the Heavens, and a number of shrines to other gods; the walls are painted with pictures of the Tibetan kings and their retinues.

Page 5.

The whole of the western face of the cliff for a distance of 2 *li*, north and south, has been hewn and chiselled out into a number of lofty and spacious sand-caves containing images and paintings of Buddha. Reckoning cave by cave, the amount of money lavished on them must have been enormous. In front of them pavilions have been erected in several tiers, one above another. Some of the temples contain colossal images rising to a height of 160 feet, and the number of smaller shrines is past counting. All² are connected with one another by

¹ 促 is to be taken in its ordinary sense of "bringing close together". It is thus practically synonymous with 積.

² My conjecture of 悉 is confirmed by Professor E. H. Parker, who says that it is quite the ordinary "grass".

galleries,¹ convenient for the purpose of ceremonial rounds as well as casual sight-seeing.

On the hill to the south of this there is a spot where the Bodhisattva Kuan-yin once made herself visible. Whenever people from the city go to visit it they make the journey on foot, both going and returning; that is the way in which they express their reverence.

The Hill of Sounding Sand is 10 *li* away from the city. It stretches 80 *li* east and west, and 40 *li* north and south,² and it reaches a height of 500 feet in places. The whole mass is made up entirely of pure³ sand. This hill has strange supernatural qualities. Its peaks⁴ taper up to

¹ My father is of opinion that the Chinese 悉有虛豁通達 cannot yield the meaning which I adopted first, namely, "all are freely accessible from the outside." On the other hand, I have ascertained from M. Pelliot that there is no internal communication between the grottos themselves. His letter, however, which reached me just too late for insertion in the original article, suggests the true solution of the difficulty: "Pour la question que vous me posez, il va sans dire que j'ai sur l'aménagement des grottes de Touen-houang des souvenirs visuels et documentaires fort précis. Il y a plusieurs centaines de grottes, et il n'y a pas de passage intérieur de l'une à l'autre. Mais pour les grottes qui n'étaient pas au niveau même du sol, beaucoup étaient réunies par des galeries, des balcons parfois couverts et dont certains subsistent; vous en avez probablement des spécimens dans certaines des photographies de Stein. Presque tous les balcons subsistants sont très anciens; il en est du x^e siècle."

² The two characters 十 "ten" should, I think, be deleted, which would reduce the hill to the more reasonable proportions of 8 × 4 *li*.

³ I cannot quite accept Mr. Ha's assertion (iv, 2) that no stroke has been omitted in 純. That at least one stroke is wanting seems to me as plain as a pikestaff. But I am inclined now to believe that the character was so written simply as a semi-cursive form, and not because it was taboo.

⁴ There are two reasons, according to my father, why 峯 must be plural here: (1) the natural meaning of 間 is "among" or "in between", as seen in 石間, p. 13, col. 4; (2) the words 皆躋高峯, just below, can only mean "all clamber up some high peak" (not "to the summit"), implying that there is more than one. The latter argument seems pretty conclusive; but as regards my former rendering of 間 (on the hill), I can point to a similar use of the word in the *Liao Chai*, Tan Ming-lan's edition, chüan 1, f. 10 v^o, col. 6: 師乃剪紙如鏡粘壁間 "the old priest took some scissors and cut out a circular piece of paper like a mirror, which he proceeded to stick on the wall".

a point,¹ and between them there is a mysterious hole² which the sand has not been able to cover up. In the height of summer the sand gives out sounds of itself, and if trodden by men or horses the noise is heard many tens of *li* away. It is customary on the *tuán-wu* day (the Dragon festival on the fifth of the fifth moon) for men and women from the city to clamber up to some of the highest points and rush down again in a body, which causes the sand to give forth a loud rumbling sound like thunder. Yet when you come to look at it the next morning the hill is found to be just as steep as before. The ancients called this hill the Sounding Sand; they deified the sand and worshipped it there.³

Page 7.

Near by, to the south, is the Kan-ch'üan River. Tracing it southward from the Hill of Sand, we find its original source to be in the Great Snowy Mountains (the Nan-shan range). It enters the Tun-huang district through the territory of Shou-ch'ang hsien in the south-west. On account of its fertilizing properties it is commonly called Kan-ch'üan [Sweet-spring].

The Chin-an [Golden Saddle] Mountain is situated to

¹ 如削 is evidently a stock phrase for tapering mountain peaks. I have just come across it again in the preface to 重陽庵集.

² The word 井, as my father points out, can hardly be a well here, though the *Sha ch'ou chih* has the gloss 泉. It is simply a mysterious hole, such as our mediaeval writers have termed a *cunus diaboli*.

³ I have adopted Mr. Hu's correction (i, 1), but though he is doubtless right in saying that 嗣 is a verb, and that 焉 closes the sentence, I do not feel quite so certain about 神. It is a fact that the name 神沙 "spiritual sand" was applied to the hill. See *Ta Ch'ing I T'ung Chih*, ch. 170, fol. 4 r^o, col. 1: 鳴沙山一名神沙山. Professor Parker has also pointed out my mistake with regard to 焉, but he goes on to say: "I don't think it will be possible to find anywhere, at any date, an example of *yen* being followed by anything but a 虛字, and (as I showed) it seems *always* to = the French *en* or *y*." In reply, I must confront him with his own words in the *China Review*, vol. xxiv, p. 260: "Finally, *yen* occurs in a medial position between two parts of one idea. . . . For instance, 無人焉阻止之 'and [they said] there was no one to prevent him': *neminem quidem preventurum*. *Yen* here has the force of *quidem*."

the south-west of the Hill of Sand. It has snow on it throughout the summer. There is a shrine there of high spiritual potency which people dare not approach. Every year the local chief sacrifices to the god of the mountain with his face turned in that direction, and offers up a fine horse, which he drives into the recesses of the mountain. But if he ventures too near he immediately provokes a destructive hail-storm, with thunder and lightning. Page 8.

South-west of the city stands the Li Hsien-wang temple, that is to say, a temple dedicated to the ancestors of Chao Wang of the Western Liang State. In the *ch'ien-féng* period (A.D. 666-8) a lucky stone was picked up close beside this temple; its colour was bluish-green, and it bore a red inscription in the ancient character, to wit: "I can foretell thirty generations, I can foretell 700 years." To-day this temple is known as the "Li temple". Page 9.

West of the city is the Yang Barrier, which is the same as the ancient Yü-mên (Jade Gate) Barrier. It was because Yang Ming, when Governor of Sha-chou, resisted an Imperial warrant for his arrest and fled over the border by this gate, that it afterwards came to be known as the Yang Barrier. It connects China with the capital of Shan-shan, but the natural obstacles of the route and its deficiency in water and vegetation make it difficult to traverse. The frontier-gate was afterwards shifted to the east of Sha-chou. Page 10.

Eighty-five *li* west of the city is the Yü-nü [Beautiful Woman] Spring. The stories that have been handed down about it are largely fictitious.¹ Every year a youth and a maiden used to be conducted to this spot by the people of the district and sacrificed together² to the spirit

¹ 靈, the reading proposed by Mr. Hu (iii, 1), appears to me a doubtful and unnecessary conjecture. In any case, I have to deal with the text as it stands, and there can be no doubt that the character written by the copyist is 虛. It is used again in the same figurative sense on p. 13, col. 5.

² I have now come to the conclusion that the character which I first took to be 夜 is really 交.

of the pool. This ensured a plentiful harvest, but if the ceremony was omitted the crops were spoilt. Although the parents were bitterly distressed at having their children thus torn from them, the boy and girl who had been chosen by the spirit would cheerfully take each other by the hand and drown themselves.

Page 11.

In the *shên-lung*¹ period (A.D. 705-6) the Governor Chang Hsiao-sung on arriving at his post made inquiries about this custom from the inhabitants of the district. They gave him particulars, whereupon the Governor exclaimed in anger: "I won't have this bogey in the fountain injuring us with its miraculous tricks!"² So he had an altar erected, and sacrificial victims prepared alongside the spring. Then he called out: "I prithee reveal³ thy true form, that I may sacrifice to thee in person." The spirit forthwith changed into a dragon and came out of the water, whereupon the Governor drew his bow⁴ and shot the creature in the throat; then he whipped out his sword and cut off its head. This, on a subsequent visit to the Palace, he presented to the Emperor, Hsüan Tsung, who showed great admiration for his exploit and graciously bestowed on him the tongue of the dragon, with a decree that he should receive the title of *Lung-shê Chang Shih* (Mr. Chang of the Dragon's tongue). This is entered in the official records.

Page 12.

One *li* north-west of the district city there is a monastery and a thick clump of old trees.⁵ Hidden amongst them is

¹ It is an almost diabolical coincidence, from the translator's point of view, that this spirit-dragon (*shên lung*) should have been slain in precisely the *shên-lung* period.

² Professor Parker also suggests 害 instead of 客, and takes exception to my statement that 恠 is a vulgar form of 怪; but my authority is K'ang Hsi's Dictionary, which further states that this form was originally a variant arbitrarily introduced into the "clerkly style" of handwriting by 顏真卿 Yen Chên-ch'ing (A.D. 709-85).

³ My father points out that 見 is in this context not *chien*² but *hsien*⁴.

⁴ More literally, "laid [an arrow] on the string."

⁵ Mr. Hu (i, 5) is very severe on my punctuation here, although the sense of the passage remains unaffected. Indeed, in the English it is

a mound, on the top of which is erected a miniature palace, complete in every part.

There was formerly a sub-prefect of Sha-chou, one Chang Ch'iu, who, when already advanced in years, took a fancy to the spot and settled down to live there. Although not a man of wide scholarship, he was exceedingly earnest and painstaking, for after the country had passed through many years of revolution, and but few men were left to practise the instructor's calling, he collected the younger generation together in order to expound to them the great principles of government. But God could not spare him long for the people to enjoy his bounty. Page 13.

The Alabaster Mountains are 256 *li* to the north of the city. The alabaster is found among the rocks on the Wu [Black] and the Fêng [Beacon] Mountains. In the 19th year of *k'ai-huang* (A.D. 599) the Black Mountain turned white. The fact has been verified and found to be no empty fable. The Taoist monk Huang-fu Tê-tsung and others, seven in all, were sent there to make sacrifices and libations. And ever since then the mountain has had all the appearance of being a snow-covered peak. Page 14.

The town of Ho-ts'ang is 230 *li* north-west of the city. In ancient times a military magazine stood here.

The Great Wall, built¹ under the former Han dynasty, passes 63 *li* to the north of the city² and runs due west out into the desert.

Going north, you enter the territory of I-chou [Hami].

better to put the stop after "trees", which in Mr. Hu's version seem to spring from nowhere. Much more important is the fact, noted by my father, that 堡 is here "a mound" and not "a fort".

¹ Mr. Hu has certainly solved the difficulty here (iii, 2). I had already received the same correction from Mr. Edmund Backhouse, of Peking, who has had considerable experience of Chinese MSS. "How often," he says, "have I been rebuked by scholars for scratching a character out instead of keeping the page tidy by re-writing it and adding the 一 to show that the wrongly written one was to be passed over."

² Omitting the characters 其城 and placing a stop after 里.



V

THE ARCHIVES OF AN ORACLE

BY L. C. HOPKINS

MEAGRE and disappointing as it seems, the collection of phrases and sentences that follows has been extorted from the nearly nine hundred specimens of inscribed bone and horn fragments in my possession only after close study during six years. Whether the result is worth the work and the time, it is useless now to ask. But such as they are, I have desired to put before other workers the deciphered extracts from these unusual records for two reasons. The first is that I seem to have reached the limit attainable by my own individual efforts. The second and especial reason is that if other students of Chinese would consent to devote some attention to the texts now presented and translated, I am confident that numerous difficulties would be cleared up, not a few fruitful suggestions elicited, and—it would be too foolish to think otherwise—various errors and ignorances exposed. If all or any of these consequences should follow, much needed light would fall on dark places, and some misty uncertainties be dissipated. I feel fairly convinced that there are things of real interest concealed in the legends on these objects, and I suspect also some surprises.

In the following number of this Journal I hope to publish some Notes on the passages now presented, together with a Plate of facsimile copies of the original texts, of which the modern counterparts are given below. The want of corresponding facsimiles has detracted from the value of the list of similar extracts which filled the last pages of Mr. Lo Chên-yü's admirable pamphlet *Yin Shang Chêng Pu Wên Tzŭ K'ao*, "An Examination of the Characters used in Divination in the Yin-Shang Dynasty."

PHRASES OF TWO WORDS

1. 安喜 *an hsi*, content and happiness.
2. 安樂 *an lo*, content and joy.
3. 長生 *ch'ang shêng*, long life.
4. 正月 *chéng yüeh*, the 1st month.
5. 吉祥 *chi hsiang*, good fortune.
6. 吉日 *chi jih*, a lucky day.
7. 吉璧 *chi pi*, a lucky disk.
8. 吉魚 *chi yü*, a lucky fish (i.e. a cowrie).
9. 今日 *chin jih*, to-day.
10. 今月 *chin yueh*, this month.
11. 降吉 *chiang chi*, to send down good luck.
12. 降福 *chiang fu*, to send down happiness.
13. 降祥 *chiang hsiang*, to send down good fortune.
14. 中裏 *chung li*, in the centre.
15. 中宗 *chung tsung*, the Temple-name of the Emperor T'ai Mou of the Shang dynasty, reigned 1637-1562 B.C.
16. 福靜 *fu ching*, happiness and peace.
17. 福喜 *fu hsi*, happiness and joy.
18. 福祥 *fu hsiang*, happiness and good fortune.
19. 福壽 *fu shou*, happiness and long life.
20. 西裏 *hsi li*, in the West.
21. 西陵 *hsi ling*, the Western Passes. (Said to be also an ancient tribal name, see Chavannes, *Mémoires historiques*, vol. i, p. 34, n. 4.)
22. 祥吉 *hsiang chi*, good fortune.
23. 祥日 *hsiang jih*, a fortunate day.
24. 祥璧 *hsiang pi*, a fortunate disk.
25. 行龍 *hsing lung*, the moving (or soaring) dragon.
- 25a. 小牢 *hsiao lao*, the lesser sacrifice.
26. 日月 *jih yueh*, sun and moon.
27. 來祥 *lai hsiang*, to bring good fortune, for luck's sake.
28. 靈鐘 *ling chung*, a magic bell.
29. 靈圭 *ling kuei*, a magic tablet.

30. 靈龜 *ling kuei*, a magic tortoise.
31. 靈璧 *ling pi*, a magic disk.
32. 靈魚 *ling yü*, a magic fish (viz. a cowrie).
33. 樂喜 *lo hsi*, mirth and joy.
34. 龍璧 *lung pi*, a dragon disk.
35. 卯牢 *mao lao*, a male victim for sacrifice.
36. 卯牛 *mao niu*, a bull.
37. 南裏 *nan li*, in the south.
38. 年吉 *nien chi*, harvest favourable.
39. 北裏 *pei li*, in the north.
40. 白豕 *pai shih*, a white pig.
41. 三酎 *san ch'ou*, trebly distilled spirit.
42. 三光 *san Kuang*, the Three Lights (Sun, Moon, and Planets).
43. 上天 *shang t'ien*, Heaven above.
44. 盛德 *shéng té*, abundant virtue.
45. 聖德 *shéng té*, sacred virtue.
46. 受年 *shou nien*, the year's harvest.
47. 孫子 *sun tzü*, grandsons and sons.
48. 大吉 *ta chi*, great luck.
49. 大祥 *ta hsiang*, great fortune.
50. 大牢 *ta lao*, the greater sacrifice.
51. 大室 *ta shih*, the principal apartment of the ancestral temple, modern 太室 *t'ai shih*.
52. 大宗 *ta tsung*, the ancestral temple.
53. 大陰 *ta yin*, the great feminine, probably the moon.
54. 大月 *ta yueh*, probably for 大悅 *ta yueh*, great joy.
55. 大雨 *ta yü*, heavy rain.
56. 得吉 *té chi*, may he have good luck.
57. 得祥 *té hsiang*, may he have good fortune.
58. 得祿 *té lu*, may he have prosperity.
59. 多吉 *to chi*, much good luck.
60. 多祥 *to hsiang*, much good fortune.
61. 多利 *to li*, much benefit.
62. 多福 *to fu*, much happiness.

63. 多孫 *to sun*, many grandsons.
64. 多子 *to tsü*, many sons.
65. 千吉 *ts'ien chi*, a thousand-fold good luck.
66. 靜陽 *tsing yang*, perhaps for 青陽, the "pure masculine"; a term for the Sun.
67. 左裏 *tso li*, on the left.
68. 作龜 *tso kuei*, to scorch the tortoise-shell.
69. 彤日 *tung jih*, the day of the supplementary sacrifice.
70. 東裏 *tung li*, in the east.
71. 望幸 *wang hsing*, an Imperial visit.
72. 文圭 *wén kuei*, a decorative tablet.
73. 文璧 *wén pi*, a decorative disk.
74. 亡難 *wu chien*, no difficulties.
75. 亡悔 *wu hui*, no regret.
76. 亡災 *wu tsai*, no calamity.
77. 陰陽 *yin yang*, the feminine and the masculine.
78. 右裏 *yu li*, on the right.
79. 元吉 *yuan chi*, prime good luck.
80. 元祥 *yuan hsiang*, prime good fortune.
81. 月吉 *yueh chi*, the moon lucky (or auspicious).
82. 月祥 *yueh hsiang*, the moon fortunate (or auspicious).
83. 月璧 *yueh pi*, a moon disk.
84. 月德 *yueh té*, the virtue or influence of the moon.
85. 永吉 *yung chi*, perpetual good luck.
86. 永年 *yung nien*, years without end.

PHRASES OF THREE AND FOUR WORDS

87. 吉日作龜 *chi jih tso kuei*, on a lucky day scorched the tortoise-shell.
88. 日在寅 *jih tsai Yin*, the sun being in Yin.
89. 旅行多寧 *lü hsing to ning*, a journey with much tranquillity.
90. 保其至吉 *pao ch'i chih chi*, keep him in the utmost welfare.
91. 保其福田 *pao ch'i fu t'ien*, preserve his field of happiness.

92. 不 遘 大 雨 *pu kou ta yü*, not to encounter heavy rain.
93. 得 福 安 樂 *té fu an lo*, may he have happiness, ease, and joy.
94. 多 慶 祥 *to ch'ing hsiang*, many happy events!
95. 多 福 祥 *to fu hsiang*, much prosperity.
96. 七 月 元 日 *ts'i yueh yuan jih*, the 1st day of the 7th moon.
97. 子 孫 萬 年 *tzü sun wan nien*, posterity in perpetuity.
98. 子 孫 延 年 *tzü sun yen nien*, posterity for many ages.
99. 子 孫 永 用 *tzü sun yung yung*, for the perpetual use of his sons and grandsons.
100. 王 卜 貞 *wang pu chêng*, the king consulted the oracle by the tortoise-shell.
101. 延 慶 祥 *yen ch'ing hsiang*, continual happiness.
102. 延 福 祥 *yen fu hsiang*, continual prosperity.
103. 延 年 得 慶 祥 *yen nien té ch'ing hsiang*, having happiness for many long years.
104. 于 西 山 *yü hsi shan*, in, or to, the western hills.
105. 月 吉 日 祥 *yueh chi jih hsiang*, the moon lucky, the sun auspicious.

SENTENCES

106. 示 其 獲 鹿 *shih ch'i huo lu*. Foretells the capture of deer.
107. 田 射 萬 鹿 *tien shé wan lu*. May he chase and shoot a myriad deer.
108. 九 月 吉 日 作 龜 來 祥 今 日 雨 至 *chiu yueh chi jih tso kuei lai hsiang chin jih yü chih*. In the ninth moon on a lucky day scorched the tortoise for luck's sake. To-day rain will come.
109. 其 曰 王 射 萬 鹿 祥 *ch'i yueh wang shé wan lu hsiang*. The [omen] says the king's shooting will be altogether fortunate.

110. 今日雨來月吉 *chín jih yü lai yueh chi*. To-day rain will fall and the coming month will be lucky. [Or perhaps, may to-day's rain bring in a lucky month.]
111. 戊申卜貞王徙于鄆往來無災 *mou-shén pu chéng wang hsi yü Shao wang lai wu tsai*. On the day *mou-shén* took an omen as to the king moving to Shao: nothing harmful in going or returning.
112. 丁亥卜貞王徙往來無災 *tíng hai pu chéng wang hsi wang lai wu tsai*. On the day *tíng-hai* took an omen as to the king moving: nothing harmful in going or returning.
113. 壬午卜貞王田往來無災 *jén wu pu chéng wang tien wang lai wu tsai*. On the day *jén-wu* took an omen as to the king hunting: nothing harmful in going or returning.
114. 戊申卜 * 貞 * 作大邑于 [text broken off]. *mou shén pu—chéng—tso ta i yü*. On the day *mou-shén* took an—omen—as to building a large city in . . .
115. 自今至于辛亥雨 *tzü chin chih yü hsin hai yü*. From to-day until the day *hsin-hai* it will rain.
116. 今日示其雨 *chín jih shih ch'i yü*. To-day the indications are for rain.
117. 辛卯卜貞王徙于京往來無災 *hsin mao pu chéng wang hsi yü ching wang lai wu tsai*. On the day *hsin-mao* took an omen as to the king moving to the capital: nothing harmful in going or returning.
118. 戊子卜貞王徙于陟往來 *mou tzü pu chéng wang hsi yü yung wang lai* [the usual *wu tsai*, "nothing harmful," is omitted]. On the day *mou-tzü* took an omen as to the king moving to Yuug: in going or returning . . .

119. 乙未卜貞自武乙三日 *i wei pu chéng tsǎ wu i san jih*. On the day *i-wei* took omens from Wu I for three days . . .
120. 受有五牢 *shou yu wu lao*. Received five sacrificial victims.
121. 王卜貞田畝往[來無]災王 * 曰吉茲記獲隹二百十五兔一雉二 *wang pu chéng tien ling wang [lai wu] tsai wang — yueh chi tsǎ chi huò chui erh po shih wu t'u i chih erh*. The king took an omen as to hunting in Ling: [nothing] harmful in going [or returning]. The king's — said good luck. It is now noted that there were captured small birds 215, hare 1, pheasants 2.
122. 癸酉卜行貞 *kuei yu pu hsing chéng*. On the day *kuei-yu* took an omen as to a journey.
123. 己丑卜疑貞今月無 *chi ch'ou pu i chéng chin yueh wu* . . . On the day *chi-ch'ou* took an omen as to a doubtful matter. This month there will be no [text here broken off].
124. 戊申卜旅貞 *mou shén pu lü chéng*. On the day *mou-shén* took an omen as to an expedition.
125. 貞五牢 *chéng wu lao*. Took omens from five victims. [Presumably from the bones of these beasts after slaughtering them for sacrifice.]
126. 庚午卜貞今月無凶 *kéng wu pu chéng chin yueh wu hsiung*. On the day *kéng-wu* took an omen. This month there will be nothing untoward. [Same sentence with different cycle characters on H. 69.]
127. 戊亥王卜 *mou hai wang pu*. On the day *mou-hai* the king took an omen. [Sentence complete, no other characters.]
128. 自上田行至于觚無 * *tsǎ shang t'ien hsing chih yü yü wu* —. From Shang T'ien travelling as far as Yü [in Honan] there will be no —.

[The unknown character probably stands for some such word as "untoward".]

129. 乙酉卜旅貞王其田于 * 往來無災在 一 月
i yü pu lü chéng wang ch'i tien yü—wang lai wu tsai tsai i yüeh. On the day *i-yü* took an omen as to an expedition. The king will hunt in [here follows a blank space in the original]. No mishap in going or returning, in the first month.
130. 自上田卒至于觥余一人無凶 *tsü shang t'ien tsu chih yü yü yü i jén wu hsiung.* Hastening from Shang T'ien as far as Yü, I, the One Man, shall have no mishap.
131. 無水在九月 *wu shui tsai chiu yüeh.* No floods in the ninth month.
132. 王其田無災 *wang ch'i tien wu tsai.* The king's hunting will be without mishap.
133. 其 * 于 霽 有 大 雨 *ch'i — yü yü yü ta yü.* The — at Yü, there will be heavy rain.
134. 王其徙于向無災 *wang ch'i hsi yü hsiang wu tsai.* The king will move to Hsiang without mishap.
135. 乙亥卜貞王其田無災 *i hai pu chéng wang ch'i tien wu tsai.* On the day *i-hai* took an omen as to the king's hunting: no mishap.
136. 命弟子子孫曰 *míng tí yü tsü sun yüeh.* Commanded his younger brothers and his sons and grandsons, saying . .
137. 在祖乙宗 *tsai tsu i tsung.* In the ancestral temple of Tsu I.
138. 辛亥率母弟 *hsin hai shuai mu ti.* On the day *hsin-hai* will [or, did] conduct mother and younger brothers.
139. 巳亥貞其祠于祖乙 *chi hai chéng ch'i ts'ü yü tsu i.* On the day *chi-hai* took an omen as to the sacrifice to Tsu I.

140. 癸丑卜貞今歲無大水 *kuei ch'ou pu chéng chin sui wu ta shui*. On the day *kuei-ch'ou*, ascertained by omen that this harvest there will be no floods.
141. 癸丑卜貞茲月有雨 *kuei ch'ou pu chéng chi tz'ü yueh yu yü*. On the day *kuei-ch'ou* ascertained by omen that by this month there will be rain.
142. 癸未貞有無禍 *kuei wei chéng yu wu huo*. On the day *kuei-wei* took an omen whether or not there will be misfortune.
143. 癸丑卜貞有無禍 *kuei-ch'ou pu chéng yu wu huo*. On the day *kuei-ch'ou* took an omen whether or not there will be misfortune.
144. 獲鹿三 *huo lu san*. Caught three deer.
145. 貞自今至于庚戌不其雨 *chéng tzü chin chih yü k'eng-hsü pu ch'i yü*. Took an omen that from now till the day *k'eng-hsü* it will not rain.
146. 貞今日不其雨 *chéng chin jih pu ch'i yü*. Ascertained by omen that it will not rain to-day.
147. 己卯貞告于父丁 *chi mao chéng kao yü fu ting*. On the day *chi-mao* took an omen as to an announcement to Father Ting.
148. 甲辰給璧吉魚福祥 *chia ch'ên kei pi chi yü fu hsiang*. On the day *chia-ch'ên* presented a disk and a lucky fish [viz. a cowrie]; good fortune.
149. 辛亥尙伯給璧 *hsin hai shang po kei pi*. On the day *hsin-hai* the Baron of Shang presented a disk.
150. 丙申五月吉日給璧祥日孫子 * 一魚 *ping shên wu yueh chi jih kei pi hsiang jih sun tzü—i yü*. On the day *ping-shên*, of the fifth month, being a lucky day, presented a disk. On a fortunate day the grandsons and sons—a cowrie.

151. 癸卯賜璧 *kuei-mao ts'ü pi*. On the day *kuei-mao* bestowed a disk.
152. 戊寅給璧吉祥 *mon yin kei pi chi hsiang*. On the day *mon-yin* presented a disk: good fortune.
153. 癸巳 * 給月璧吉 *kuei-sü—kei yueh pi chi*. On the day *kuei-sü*—presented a moon disk: good luck.
154. 今日雨降其西裏 *chin jih yü chiang ch'i hsi li*. To-day rain will fall in the west.
155. 月德吉祥 *yueh té chi hsiang*. May the moon's influence bring good fortune:

I will close these extracts with two which have a definite historical interest, inasmuch as they seem to refer respectively to the first, and the last but one, of the sovereigns of the Shang or Yin dynasty, which lasted from B.C. 1766 to B.C. 1122.

156. 大乙 *Ta I*. These characters occur twice in my collection, viz. on H. 28 and H. 365, and seem to designate a personage so named. In the first example, on a fragment of deer's horn, they are inscribed side by side, the rest of the legend being in vertical columns. This horizontal juxtaposition is frequent, though not universal, on these relics with the names of personages. (I have noticed it particularly in the case of Tsu I, who reigned B.C. 1525-1506, e.g. on H. 365.) But on H. 365 the two words *Ta I* appear in the ordinary vertical sequence.

Now the curious thing is that there is no Shang dynasty emperor named *Ta* (or *T'ai*) *I* in the received list of those sovereigns. However, the Historical Memoirs of Ssü-ma Ts'ien state that the personal name of Ch'êng T'ang, the founder of the dynasty, was T'ien I (天乙). And the Chinese author, Mr. Lo Chên-yü, in his *Yin Shang Ch'êng Pu Wên Ts'ü K'ao*, Examination of the characters used in divination in the Yin-Shang dynasty, p. 3, has ingeniously observed that, judging by the analogy of the names of the early rulers of the dynasty, T'ai Ting,

Tai Chia, Tai Kêng, and Tai Mou, there can be little doubt that the received 天乙, T'ien I, is a misreading of 大乙, Ta I. I feel confident Lo is right in this. The early forms of 天 and 大 are very like, and this, I suspect, is only one of many blunders made by the Han scholars in reading and transcribing early original records. It would certainly otherwise be difficult to explain how that of the illustrious founder of the dynasty should be among the few Royal names absent from those mentioned on these bones.

157. The last extract I shall give is from a unique form of symbolic disk. The latter is of the usual type, but surmounted by a crescent moon with the two horns attached to the edge of the disk. Joined to the lower limb of the main disk, opposite the crescent, is a much smaller circle, which presumably symbolizes the sun. The main disk, the crescent moon, and the small disk are all covered with characters on both sides. The following passage is the opening part of the main inscription on the obverse, of which it forms rather more than a third. It runs, in modern script, and with reservations explained in my notes as to the 8th, 13th, and 17th characters, 甲申王卜貞受乙給其曰大陰之曰大陽之 . . . *chia shen wang pu chêng shou i kei ch'í yueh ta yin chih yueh ta yang chih* . . . "On the day *chia shên* the king inquired by omen from Shou I as to giving that which is called the Great Feminine, and that which is called the Pure Masculine . . .," the "Great Feminine" and the "Pure Masculine" being no doubt the moon and the sun. In the notes I discuss several points of transcription and translation raised by this passage, but here I desire to call attention only to the name Shou I.

In these two characters, 𠩺 } in the original, I believe we have the true name of the last sovereign but one of the Shang dynasty, known in the received text of Ssu-ma Ts'ien's Historical Memoirs as 帝乙 Ti I. It will

naturally be asked what arguments I can urge for such a novel opinion. Let me give them. In the first place, let us notice that the designations of the last two rulers of this dynasty are differently given in the Historical Memoirs and the Bamboo Books. In the Memoirs they are styled 帝乙 Ti I, and 紂辛 Chou Hsin; in the Bamboo Books, Ti I and 帝辛 Ti Hsin. The early commentator on the latter work adds the rather enigmatic note upon Ti Hsin, 名受即紂也曰受辛, *ming shou tsi chou yeh yueh shou hsin*, "His name was Shou, that is Chou. He was called Shou Hsin." Observe the apparent confusion here between Shou Hsin and Chou Hsin, and the conflict of the two authorities. (In the Book of History, Shang Shu, the name is always Shou, not Chou.)

Now if the old text of the Bamboo Books, and the genealogical records which may have formed part of the basis of Ssü-ma Ts'ien's History, contained a form resembling this character Shou as written on this and other bone fragments, it might well have been misread as 紂 *chou* by the Han scholars, and the annotator of the Bamboo Books may be correct in his note that Shou Hsin was the real designation of the last sovereign. And this name Shou may have been inherited from his father the so-called Ti I, who, as I suggest, was really the Shou I of our relic.

I had made a note to the above effect before I chanced upon a happy confirmation of this conjecture in the pages of the Liu Shu Ku of Tai Tung, under the character 受. He writes: "The Shang sovereign Shou 受 is always thus written in the Book of History; in the other classical works always 紂 *chou*. One man should not have two names. Moreover, exclusive of this Shang dynasty Chou, the word has never been used, *being an error for Shou*" (my italics).

Of course, the fact that the last of the dynasty was known as Shou Hsin does not prove that his father was

known as Shou I. But when we find a personage of that name who appears to have been a sovereign, but who cannot be identified *eo nomine* as one of the known line of Shang, the presumption seems strong that the foregoing suggestion is correct, especially as all the other three rulers having in their names the character I 乙, viz. Tsu I, Hsiao I, and Wu I, are found on the bones indicated by those very designations. The case of T'ien I, *alias* Ta I, we have already discussed.



THE ZOROASTRIAN PERIOD OF INDIAN HISTORY

By D. B. SPOONER

EVER since the exact site of Aśoka's classic capital was determined for us by the keenness and sagacity of Colonel Waddell, it has been a dream of the Government of India in the Archæological Department to subject the site of Pāṭaliputra to an examination commensurate with its importance. Colonel Waddell had, however, so abundantly demonstrated, in his trial excavations, the difficulty and costliness of extended operations here, that the dream had, until recently, appeared remote of realization. The munificence of Mr. Ratan Tata of Bombay has made the undertaking possible, and his offer of twenty thousand rupees a year, for an indefinite number of years, has enabled the Archæological Department to take up the work on a scale that would otherwise have been far beyond our resources.

My own personal thanks are due to Dr. Marshall, the Director-General of Archæology in India, for having entrusted me with the direction of this work. It is a privilege such as has come to few men in the Indian field.

This is not the place to enter upon any detailed discussion of the actual work so far accomplished. A more or less adequate statement of the progress made has already been published in the Annual Reports of the Archæological Survey, Eastern Circle, for the years 1912-13 and 1913-14, and reference may be had to these for the particulars of the work. It is, however, essential that a brief résumé of our results should be given here, as it is directly out of the excavation that the inquiry has grown whose results are embodied in this paper.

Colonel Waddell, it will be remembered, made a preliminary examination of several detached sites in and around Patna. Among these was a field situated between two tanks in the immediate neighbourhood of Kumrahar, a village south of the modern city. Here the Colonel recovered certain fragments of polished stone with a curving surface, which he rightly judged to be portions of Mauryan pillars. These, he was inclined to think, must have been of Aśokan manufacture. And, as the Chinese pilgrims tell us that Aśoka erected at least two inscribed pillars in his capital, Colonel Waddell thought that one of these two must have been located somewhere in this neighbourhood. In view of the very little evidence available as a basis for judgment at that time, these conclusions were warranted, and in determining to open Mr. Tata's excavations at this site the Department was not without hope of proving that Colonel Waddell was right.

The work was begun on January 6, 1913. It soon became apparent, then, from the multiplicity, varied texture, and small diameter of our pillar fragments, that they could not have emanated from an edict column. I therefore assumed that some Mauryan building must have been situated here, and altered my methods of work to suit this changed hypothesis. The result was entirely satisfactory, as on February 7, one month from the commencement of the work, the columnar rows of a vast pillared hall were located. It has proved, however, a work of unusual difficulty to determine the extent of this building, owing to the singular fact that the massive and imperishable portions of the structure have wholly disappeared, apparently by sinkage. The wooden parts, the roof, the floor, etc., have been burnt or have decayed, as the case may be, and all that is left at present to tell the story of the palace is the *disjecta membra* of its ruin and the singular stratigraphical indications of the soil. Evidences of this nature are not easy to observe. They are more difficult to co-ordinate,

and still more so to elucidate connectedly. This must be my excuse for not having gained a larger finality of judgment, with the men and money at my disposal; but the following pages will show that substantial progress has been made, even now.

It will be seen that the tangible evidences from which my deductions are drawn are very few. But it should be understood that stratigraphical evidences cannot lie, and that by careful observation and scrupulous tabulation they can be made to yield almost as certain information as to the nature of a structure as actual remnants of the same in situ. When we find, for example, that heaps of pillar fragments lie in rows at regular intervals across the site; that underneath these heaps of stone, descending tubular holes occur, filled from above; that these holes are always round in plan, of fixed diameter, and regularly spaced, we see as clearly that rows of columns originally stood at these particular points as though we actually had the pillars in position. It is by following methods such as these that I have derived that information which is the basis of my present inquiry. The data are at least definite and accurate. But whether my interpretation of them is the one and only right one must be left to the future to determine. One object in this paper is to make them seem more reasonable.

The starting-point for our deductions is the ground plan of the building under excavation. By the end of the first season we had located eight rows of monolithic polished pillars, with at least ten pillars in each row. For reasons we need not here discuss, one of these pillars was found to have escaped the general fate of sinkage, and this one was recovered. From it exact measurements have been determined, which have introduced an element of real precision into the study; and this has enabled me to deal with the nature and design of the palace in a manner much more satisfactory than would otherwise have been

possible at this stage. We see now, for example, that the building consisted of a vast pillared hall, presumably square, with stone columns arranged in square bays over the entire area, placed at distances of 15 feet, or ten Mauryan cubits, each from each. This much alone disclosed the fact that the building was unparalleled in ancient India. Square halls with multiple rows of pillars in square bays are commonplaces in modern Indian architecture, but the really ancient period has hitherto had none to show.

The mere fact that our building seemed unique might never have led us to the right clue for its interpretation had foreign influence in Mauryan times not been established theretofore. But it has been known for years that Aśoka's edicts echo the great Darius's, that the style of his sculptured capitals originated in Persepolis, and it had been inferred, by Dr. Marshall in particular from the Sārnāth capital, that Mauryan stonework had been wrought by foreign masons. When, then, the plan of our building seemed to be so clearly un-Indian, while our columns showed the peculiar Persian polish, it seemed to me not impossible that even in its design the building might have been under Persian influence. My wife was sure that she remembered something of the sort among the pictures of Persepolis, and her optimism finally induced me to search among the records of that site.

I did not have far to look. The so-called Hall of a Hundred Columns at Persepolis, the throne-room of Darius Hystaspes, afforded a sufficiently striking parallel to our structure at first glance. It was a square hall, with ten rows of ten columns, evenly spaced in square bays. At Pāṭaliputra, to be sure, we had only eight rows, but there was every reason to suppose that others would be found, and possibly evidence for a porch as well, to correspond with the porch in Persepolis on the north side of the throne-room. Our orientation appeared to be

correct. Nay, more, the one big column which we had recovered showed a mason's mark of curious type, which seemed extremely similar to a mason's mark familiar at Persepolis. The form was not identical, perhaps, but the resemblance was nevertheless unmistakable and very striking. This, then, was satisfactory, and I was encouraged to look more closely into the details of the two buildings. On so doing I found that Darius's columns were ten Persian cubits apart. The Mauryan columns are ten Indian cubits apart. Did this imply identity of scale? It seemed to, although there was still the outstanding possibility that the two structures had been of the same size, and that the difference between the two cubits had been equalized by using more pillars in the Indian hall. The intercolumniation at Kumrahar was found to be five diameters; an intercolumniation not identical, perhaps, with that of the Persian throne-room, but still one which is essentially Persepolitan, and never found, so far as I am aware, in any other country of antiquity. No capitals had been recovered in Patna to help us in comparing the two buildings, nor had any pedestals been met with. But a careful study of the stratification suggested that pedestals had, in all probability, existed in our hall, and the indicated dimensions and proportions justified the thought that these pedestals must have been themselves of Persepolitan type, round in plan, some 3 feet high, and, inferentially, bell-shaped, though as regards this latter point no evidence exists.

Other points of seeming similarity between the Mauryan hall and its suspected Achaemenian prototype were also found, but a discussion of them is unnecessary in this paper. Enough has been said already to explain why it seemed to me reasonable to assume, as a working hypothesis for the conduct of my future operations, that the structure under excavation really did betray strong Achaemenian influence, and that indeed it looked, at even

that early stage of the work, curiously like a copy of the Persian hall.

But, if we were justified in assuming, even tentatively that the throne-room of Darius was really the prototype of this Mauryan palace, the question then arose, what about those other palaces associated with the throne-room at Persepolis? There the throne-room is only one of a large complex of halls and porticoes. Was it conceivable that the Mauryans should have copied the whole design? It certainly was not conceivable that the hall we were excavating could have stood in splendid isolation. There must have been other buildings associated with it. Might they not have reflected the Achaemenian grouping, after all? At any rate, it could do no harm to look and see if there were surface indications at the appropriate points. In order to do this I took Lord Curzon's plan of Persepolis, marked out the south-west corner of our pillared hall as closely as was possible at that time, and started out through the jungle with tape and compass.

The whole story of that wonderful day cannot be given here. It will be found in my Annual Report for 1913-14. But here it will suffice to record that the results of that exploration were fairly astounding.

At a point almost precisely corresponding to the position of the House of Xerxes (Lord Curzon's "S.E. Edifice") I discovered a mound which was correct in form and orientation. This lay south of the pillared hall, or rather south-west, and its corners, being square, showed that it could not mark the site of any early stūpa. Now north-west of this position in Persepolis lies the Palace of Darius. On proceeding in this direction for a suitable distance, a further mound appeared, which corresponded with startling accuracy to the monument in the similar position at Persepolis. The outline of this mound, its orientation, its configuration, and its bearing from the other sites, all seemed in perfect harmony with our theory. Nay, I was also able to

determine that all these mounds, etc., lay on a well-defined raised area, with a sharply marked edge which counterfeited curiously the edge of the artificial terrace at Persepolis, not only in bearing and extent, but even as regards the south-west angle. The whole plateau appeared to have been once surrounded by a moat. This seemed to imply a Mauryan copy of the entire Persepolitan design in all its main essentials. There were even ridges and other minor indications at other points corresponding to further members of the Achæmenian group of structures; but these were less conclusive than the main mounds, and their significance was uncertain. Enough was clear, however, to show us that not only was our original pillared hall strongly reminiscent of the Persian throne-room even in matters of detail, but that its surroundings also showed a parallelism to the Achæmenian site which could not possibly be explained except by the assumption that the one reflected the other definitely.

No *certainty*, of course, could be attained until further excavations could be carried out. Concrete evidences must be found, inscriptional or otherwise, before we can determine the question finally. But I was forced to conclude either that we had the most extraordinary chapter of accidents known to archæology, or that we had a conscious Mauryan copy of Persepolis. The latter assumption seemed more probable. And yet, when I stopped to ask myself what such a Mauryan replica of Persepolis would mean, and to consider all that such a thing must seemingly imply, I was not altogether sure at first that such a theory would be really tenable. Did it appear consistent with existing knowledge?

It remains doubtful whether the purely monumental evidences previously known in India would warrant an affirmative answer to this question. It has for many years been recognized that Persian influence did indeed exist in India, although the extent of this influence was

undetermined. Mr. Kennedy, writing in the *Journal of the Royal Asiatic Society* sixteen years ago,¹ recognized Persepolis as the channel for most Assyrian forms in India, and stated that, however indigenous the elementary conceptions of art and architecture may have been, "there was abundant scope for the borrowing of detail; and, as a matter of fact," he adds, "most of the details were borrowed from Persia." And yet neither Mr. Kennedy nor, before him, Professor Grünwedel could adduce much as extant and tangible except a few Aśokan capitals, a few Persepolitan pilasters, and isolated Persian or Assyrian *motifs* as concrete evidence, beside the Aśoka inscriptions, for that influence that, none the less, they rightly predicated. Grünwedel declared that all the important monuments of really ancient India which have been preserved show undoubted Persian influence in their style. But he was forced to admit that "this Persian style . . . is unfortunately represented only by a few monuments upon which it is almost impossible to pronounce judgement".²

But does this mean that really very little Persian influence is traceable in early India? And, just because few monuments can be adduced to prove the point, are we to hold that theories of large influence are untenable? By no means. We know that Darius counted India among his provinces, although the extent of his dominions in this country is unknown, and Bühler endorsed the ascription of the Kharoshthī system of writing to the Aramaic clerks of Achæmenian rule. These facts alone justify Grünwedel and would render plausible enough an assumption of large Persian influence in early days, even had we no shred of other evidence at all. But, when we come to the Aśoka period and find his edicts echoing

¹ Cf. *JRAS.*, April, 1898, p. 283.

² Cf. Grünwedel, *Buddhistische Kunst in Indien* (1st ed., Berlin, 1893), p. 17; Grünwedel & Burgess, *Buddhist Art in India*, p. 17.

Darius's; when Dr. Marshall tells us his columns and his capitals were wrought by Greco-Persian masons; when Dr. Thomas shows us how we must look to the façade of Darius's tomb to realize how the Mathurā Lion Capital fitted into place, we surely see that Persian influence in early India is no hypothesis at all. The only mystery is that monumental evidences are so few.

It may be true that, so far as Indian architecture is concerned, the only substantial point showing Persian influence is the capital.¹ It may be true that no architectural plan in India, nor any type of building, as a whole, has hitherto been known which one could say was based directly on a Persian model. But these facts do not militate against our theory seriously, nor render our suggested interpretation of the archæological indications at Kumrahar at all unpalatable, as they show us that Persian influence *ought* to be traceable in India more largely than it is. But our case is even stronger, for these evidences do not stand alone. There is fortunately a certain body of literature also available, in conjunction with which our other data gain greatly in cohesion and significance.

Megasthenes will bear us testimony that the Indian Court was almost wholly Persian in his day. Mr. Vincent Smith has brought together the details in his invaluable *History*, and the picture which he paints for us of Chandragupta's Court is Achaemenian in every line and tint. By far the strongest of the evidences named above are obviously those for the Aśoka period. When the edict pillars of Aśoka testify to Persian influence, not by their style alone, but by their substance and their very script, it is clear that he, at least, drew definitely on the West for inspiration. Without Megasthenes, however, the

¹ According to Fergusson the most Persepolitan of all Indian capitals are those in the comparatively late caves of Beda; cf. *Indian and Eastern Architecture*, 2nd ed., vol. 1, p. 138.

fact *could* seem an isolated one, a personal predilection, possibly of the individual, not of itself involving necessarily any subservience to Persian culture on the part of either Court or country, and, indeed, restricted largely, so it might have seemed, to the one domain of royal proclamations. Megasthenes shows us that this was not the case, and teaches us that in this turning to the West for inspiration Aśoka made, himself, no new departure, but merely followed in a course inaugurated by his grandfather, and thus familiar to the dynasty as such. Indeed, considering what the classic authors say, it is apparent that in the earlier days Persian influence at the Mauryan Court was, if anything, stronger than has hitherto been evidenced for later times. We know, however, that even in Aśoka's reign the Viceroy in the west of his dominions was an actual Persian named Tushāspa, and it is believed that the famous waterworks he carried out were copies of the Babylonian. But for Chandragupta's time the evidences are more numerous and more detailed, and indicate a following of Persian customs all along the line—in public works, in ceremonial, in penal institutions, everything.

Here, then, we find an atmosphere indeed congenial to our postulate. At a Court where the Indian monarch washed his royal hair according to the Persian calendar, and built the royal highway from his palace in imitation of Darius's, his palaces themselves may very well have been as imitative as the royal road. We therefore need no longer hesitate to give our archaeological evidences at Kumrahar their full face value. Far from being opposed to our existing knowledge, they merely supplement and complete it, uniting previous scraps of information into a consistent and harmonious whole, and showing us upon the threshold of the historical period a dynasty of almost purely Persian type—how purely Persian we shall see as we go on. The only loss involved, if this be so, concerns

Aśoka. He has hitherto been credited with having introduced the use of stone, and Greeks have shared with Persian the honour of inspiring him. But is there any trace of Greek influence at Chandragupta's Court in all the records of Megasthenes? A Greek himself, Megasthenes would surely not have failed to boast of his own nation's influence at a foreign Court which he openly admired, had such existed. But this he most conspicuously fails to do. The inference is thus warranted that any Greek touches we may trace in Piyadasi's reign are later in their origin, and possibly of Bactrian provenance—a view, I think, which Dr. Marshall holds. For Chandragupta's time the evidences point to Persia only. ✓

But then the question arises, is Megasthenes admissible as evidence for any structures yet discovered at Kumrahar? If these are of Aśokan origin, Megasthenes may not be strictly relevant, as all his words relate to edifices older than Aśoka by two generations, and generations, too, which must have witnessed strides in all directions, as the Mauryan empire settled to solidity. To justify reliance on Megasthenes as really relevant to my contention, I must refer to Chinese sources.

In Fa Hien one sentence in particular has obvious bearing. In describing how the genii had built Aśoka's "halls and palaces", he says, "piled up the stones and raised the walls and gates" (*lei shih ch'i ch'iang ch'üeh*, 累石起牆闕).¹ This must, with certainty, refer to walls of stone, and the testimony is more valuable as Fa Hien describes what he himself had actually beheld. The description, however, is inapplicable to the structures under excavation at Kumrahar. These, so far as can be judged, were wholly built of wood. Possibly portions were made of brick, but stone was used sparingly, for certain features only. What Fa Hien describes is real

¹ Legge, *Record of Buddhistic Kingdoms*, trans., p. 77; text, p. 二十元.

stone architecture of developed type. At Kumrahar what we see is the first use of dressed stone for building purposes, where stone is still subordinate to wood, and largely restricted to columnar use, and use in decorative adjuncts to the structure. The architectural stage appears essentially an older one.

But let us note that, although Fa Hien's description of Aśoka's palaces would make it difficult, if not impossible, to assign our new-found monuments to this emperor, it is nevertheless in no way inappropriate to a Persian palace, or rather, I might say, it seems of singular propriety for buildings of the Persian type specifically. Not only did the genii pile up the stones to build the walls and gates; they further executed, as Legge puts it, "the elegant carving and inlaid sculpture work . . . which no human hands of this world could accomplish."¹ These words are surely apt enough in application to the palaces of Darius or of Xerxes, with their vast sculptured stylobates of stone, even if we do not press the "inlaid sculpture work". I do not know, myself, exactly what these words imply. The Chinese text says only *k'o lou*, 刻鏤, which Giles explains² as (a) "to cut into", (b) "to carve, engrave", or, both combined, as equal to "inlay". The thought lies near at hand that what the pilgrim really means are figural mosaics of glazed brick, like those of Susa.³ If this is really so, the Persian nature of even Aśoka's palace is assured indeed. However that may be, and whether Fa Hien be taken as implying Persian influence in Aśoka's palaces or not, he certainly cannot be quoted in support of any ascription to Aśoka of our buildings at Kumrahar, so far as present indications go.

Nor can Hsien Tshang. He tells us little of the nature of the Aśokan monuments, but fortunately one passage

¹ Legge, *Record of Buddhistic Kingdoms*, trans., p. 77.

² Dictionary numbers 6099 and 7354.

³ Cf. the Lion Frieze and the Frieze of Archers pictured by Perrot and Chipiez against p. 420 of their *History of Art in Persia*, English trans.

may be noted which bears significantly on the question of topography. After mentioning the "old palace", which to my mind, means Aśoka's palace inferentially, and having dealt successively with all the sites of interest lying to the north, the pilgrim, standing at the palace as his centre, turns him then towards the group of stūpas now identified with Pāṇch Pahārī. In one straight line with these apparently, and somewhere midway between them and the palace itself, he notes the presence of an ancient terrace beside a little hill of stone. The passage has been variously rendered, and seems to have been of vague significance to most translators. Beal calls it not a terrace, but a tower; but Watters must be right in using "terrace" to interpret *t'ai*, 臺. Both he and Beal, however, then assert that *of* the tower, or *of* this terrace, the stone foundations were still traceable. But is this consonant with what is known of Pāṭaliputran archæology? Such foundations as have hitherto been met with in this city are of wood, and wooden palisades are attested both by the *ξύλινον περίβολον* of Megasthenes, and by considerable stretches actually recovered here and there in Patna to confirm the Greek. If any terrace did exist, we may feel sure that its foundations were of wood. The Chinese text thus seems to me to demand a different rendering. The original¹ reads: *p'ang yu ku t'ai; yā ch'ī ch'ī sh'ih; ch'ih ch'ao tien i*, 傍有故臺。餘基積石。池沼澗滴。 Word for word this may be rendered, "beside [the small stony hill], there is, old, terrace; extant, foundations, heaps, stones; ponds, pools, flowing water, ripples." In view, therefore, of what actually meets the eye at Pāṭaliputra, I propose to interpret this to mean that by the side of the little hill aforementioned there was an ancient terrace, *upon* which still existed old foundations and heaps of stone debris, together with

石 ¹ Kyōto edition, vol. ii, book viii, p. 10, last line; Beal, *Buddhist Records*, etc., vol. ii, p. 95.

tanks of rippling water. From the archæological point of view this is a rendering considerably more probable than any hitherto advanced. It literally and with accuracy describes the terrace now discovered, whereon tanks and old foundations must indeed have been traceable in Hiuen Thsang's time. I have, therefore, no hesitation in advancing this version of the text, and applying it to the site of Mr. Tata's excavations.

The bearing from Pāñch Pahārī is, however, incorrect as stated in the Chinese, where all the manuscripts collated for the Kyōto edition (kindly sent me by my former *guru*, Dr. Takakusu) place both the terrace and the stūpas south-west of the old palace.¹ But as no one, so far as I can remember, has ever sought to place the palace north-east of Pāñch Pahārī, and as the places mentioned by Hiuen Thsang as lying to the north were sought by Colonel Waddell generally to the north-west of the Kumrahar site, the single character involved seems open to suspicion. Pāñch Pahārī is definitely south-east of both our terrace and any probable location for Aśoka's palace, and instead of *hsi nan*, 西南, "south-west," we presumably must read *tung nan*, 東南, "south-east." At all events, even putting aside this suggested alteration of a single character, and one relating only to that most readily mistaken of all vocables, the cardinal points, it is to my mind certain that the pilgrim is referring to our terrace at Kumrahar, and equally certain that he differentiates it from Aśoka's palace. Thus both our Chinese authors seem to indicate that our remains are not those of the Aśokan palaces. That they are not of later date is obvious from the monuments themselves. We therefore must assign them either to Bindusāra or to Chandragupta, and the relevancy of Megasthenes is manifest in either case.

¹ Watters' rendering of 故宮, *ku kung*, by "old city" seems to me indefensible.

If, then, the ascription of these buildings to the earliest Mauryan times is justified, and they themselves seem striving to proclaim their Persian character, the harmony between our archæological evidences and our Greek historians would seem complete. If to all this there can be added evidence from Indian literary sources tending to prove the existence of Persian buildings at this period, the chain of testimony will be all that could be wished, and the probability of Achæmenian dominance in Mauryan architecture be raised to very near a certainty. Our first inquiry in this paper, therefore, must be into the Indian evidences on this architectural point.

✓ I had not, myself, expected any Indian documents to shed light upon the question. I must therefore thank Professor Jacobi for suggesting that perhaps the *Mahābhārata* might have some bearing on the problem. The hint has proved a clue to veins of rich suggestiveness. The first thing to catch my eye on following this distinguished scholar's counsel was a paragraph in Hopkins's *Great Epic*. On p. 391, where he discusses the age of the *Mahābhārata*, we read: "More important than this evidence [of Buddhist philosophy, etc.] is the architecture, which is of stone and metal and is attributed in all the more important building operations to the demon Asura or Dānava Maya, who by his magic power builds such huge buildings as are described, immense moated palaces with arches, and a roof supported by a thousand columns."

These words reminded me at once of the moated monuments whose buried vestiges I had been privileged to find; and when so many and so varied reasons existed for believing them to be of Persian character, actually constructed by imported Persian masons (for have we not a Persian mason's mark on our big column?), the ascription in the *Mahābhārata* of structures such as these to one Asura Maya leapt into instant meaning as an echo

of Ahura Mazda. Every detail that I have subsequently ascertained has tended to confirm this supposition. The Sanskrit text appears to me directly applicable to structures of the type recovered at Kumrahar, and as these, from all the evidences, are of Persian type, and those are openly ascribed to superhuman agency in the person of the Asura Maya, it would seem to me that all our streams of evidence converge harmoniously, and that the Asura Maya really means Ahura Mazda.¹

In making this statement I do not wish to be misunderstood as implying that Maya is, or could be, any Indian cognate equivalent of Mazda. The Indian cognate, Dr. Thomas tells me, is *medhā*. What I do mean is, that when the use of dressed stone for building purposes was first introduced into India by the Mauryas, through the instrumentality of imported Persian masons, these builders, being of Zoroastrian faith and accustomed to ascribe their works to the grace of Ahura Mazda, made this name familiar to the Indian population in this connexion specifically. As these buildings were, to the Indian mind, of supernatural grandeur and elegance, there gradually grew up the belief that Ahura Mazda was the actual builder of them. The name, however, remained at all times a foreign one, and, like all other foreign names in India, was pronounced by the people in an approximate form only.

The equation of Asura with Ahura needs no defence. That much is palpable enough. Nor does the equation of Maya with Mazda involve any serious difficulties. It is well known that foreign sounds represented in English

¹ As regards Weber's "Vermuthung" that the Asura Maya is to be identified with Ptolemaios, all I need say is that the suggestion seems to me wholly unsupported. But Weber's remark, "dass wir unter Dānavās und Asurās häufig genug fremde Völker zu verstehen haben," and his contention that Maya was originally of foreign origin are both alike serviceable for my own argument. Cf. *Ind. Stud.* ii, 243, and *Akad. Vorlesungen über Ind. Literaturgeschichte*, p. 225.

by *j* or *z* or *zh* both were and are commonly transcribed in India with a *y*, as in the case of *Āζov* and *Ayasa*, where we may be sure that the *y* was pronounced with a sound near to the French *j*, as is indeed the case in many parts of India to-day. This, then, justifies us in re-writing the form *Asura Maya* as *Asura Maja*, and the closeness of this to *Ahura Mazda* thus becomes apparent. Given *Ahura Mazda* in the mouths of imported masons, *Asura Maya*, with a *j* sound, is what might normally have been expected as the Indianized form of the name.

The association of the *Asura Maya*, thus derived, with architectural works in particular, is largely explained by what has already been said. But I would go even further than this, and would affirm that this is in entire accord with Persepolitan usage. Compare, for example, the epigraph on the great Porch of Xerxes, as rendered by Lord Curzon in his *Persia* (vol. ii, p. 156): "A great god is Ormuzd, who hath created the earth, who hath created the heavens, who hath created man . . . Xerxes the Great King saith: by the grace of Ormuzd I have made this portal . . . Many other noble monuments there are in this Parsa, which I have wrought and which my father hath wrought. That which hath been wrought is good. All of it we have wrought by the grace of Ormuzd . . ."

It may be true that neither in this epigraph nor in Persia generally was *Ahura Mazda* looked upon, in Achæmenian times, as the literal builder. But neither need we suppose that in the days of the Mauryas the *Asura Maya* was so looked upon, either. The conception of the *Asura Maya* as an active architect is an essentially later development, which presumably took place as Persepolitan architecture waned in India, and such palaces as the Mauryas had constructed came to seem more and more superhuman to the feebler generations which succeeded.

This seems to me to provide us at last with a true historical genesis for the belief that the Mauryan halls

and palaces were erected by the *genii*. Both Fa Hien and Hiuen Tshang state the fact, and what more natural background for their *kuei shén*, 鬼神, than this very Asura Maya of the texts? But we need hardly imagine that Chandragupta looked upon the Asura Maya as an architect, any more than that Aśoka supposed his palaces were built by *genii*.

It is also true, of course, that in Persia itself Ahura Mazda, being the Great Spirit and Creator, was not necessarily more closely connected with architecture than with other human undertakings. Presumably he was always invoked in every work man undertook, and all that mankind wrought at all was "wrought by the grace of Ormuzd". But in India, supposing such invocation and such ascription limited to a body of foreigners, and specifically to a body of stone-masons, the more restricted association of his name with architecture is but natural. That is to say, we should have had no legitimate grounds for surprise had we found the Indian counterpart of Ahura Mazda strictly and absolutely limited to architecture in the popular mind. But, as a matter of fact, this happens not to be the case. Even in India the originally broader character of the Asura Maya is still traceable. He is more than a mere architect, even here.

This being so, it is most instructive to observe what other functions or characteristics are ascribed to him. If these could be shown to be incompatible with the character of Ahura Mazda, to concern themselves with matters foreign to Ahura Mazda in particular or Persian life in general, our present thesis would be much endangered. As it is, the very reverse is the case. Under the word *Maya* the St. Petersburg dictionary records: "N. pr. eines Asura, eines vollendeten Werkmeisters und Kenners aller Zauberkünste . . . Lehrer der Astronomie . . . der Kriegskunst . . ." Could more appropriate attributes be found for the Great Spirit of the Zoroastrians, as known

to the wonder-working priesthood of the Magi? And is not the great Ishtar, perhaps the most popular divinity among the Persians, peculiarly associated with these very Asuras or Dānavas? Witness the compounds *asuraguru*, "teacher of the Asuras," and *dānavapūjita*, "worshipped by the Dānavas," both of which are Sanskrit names for Venus, well-attested.

So far as general character is concerned, therefore, the parallelism between the Asura Maya and Ahura Mazda is all that one could wish. Nay, more, unless I am mistaken, one line in the *Mahābhārata* is tantamount to a direct asseveration of the identity proposed. For do we not read in MBh., book ii, 1,

अहं हि विश्वकर्मा वै दानवानां महाकविः ✓

Mahākavi, I would point out, is not altogether easy in this line, if taken in the ordinary Indian sense. Maya was certainly not a "great poet". But *kavi* as a technical Zoroastrian term is quite harmonious to the character of Maya as I interpret it, and we can read the line most readily with both this term and *Viśvakarmā* in the Magian sense—

"For I am the creator, the great Kavi of the Dānavas."

Could Maya state identity with Ormuzd in clearer terms?

Turning now to the actual structures with which Maya is associated in the *Mahābhārata*, the first question to be considered is, do these buildings show any peculiarly Persian features? Are they pronouncedly Achæmenian palaces or are they merely ordinary Indian buildings on an increased scale? To this question it would not hitherto have been easy to give any categorical answer. But that they are not merely ordinary Indian buildings on a poetically exaggerated scale is sufficiently clear from the fact that nowhere in ancient India has anything of the type described in the *Mahābhārata* been met with, prior to the excavations of Pāṭaliputra. If, therefore, it can be shown

that Chandragupta Maurya did indeed erect structures for which the *Mahābhārata* text would furnish an acceptable description, it will follow, from the evidences named above, that the structures credited to Maya in the Epic were really palaces of Persian type. For it would be difficult indeed to deny the Persian character of the monuments now located in Patna.

We cannot consider the question adequately without a detailed reference to the Sanskrit text. The first passage I wish to consider is MBh. ii, 1. 14-17, which reads as follows:—

दानवानां पुरा पार्थ प्राप्तादा हि मया कृताः ॥
 रम्याणि सुखगर्भाणि भोगाद्यानि सहस्रशः ।
 उद्यानानि च रम्याणि सरांसि विविधानि च ॥
 विचित्राणि च वस्त्राणि कामगानि रथानि च ।
 नगराणि विशालानि सादृषाकारवन्ति च ॥
 वाहनानि च मुख्यानि विचित्राणि सहस्रशः ।
 विलानि रमणीयानि सुखयुक्तानि वै भृशम् ॥
 एते कृता मया सर्वे . . .

Here Maya himself is giving to Arjuna a catalogue, as it were, of all the wondrous things that he had fashioned. I translate: "Aforetimes, Pārtha, the palaces of the Dānavas were wrought by me; pavilions full of pleasures and abounding in delights a thousandfold; delightful gardens, too, and ponds of various kinds; and wondrous vestments, chariots that moved at will, and cities far extended, with high rampart walls; also thousands of wondrous vehicles most excellent, and pleasing caves to every comfort joined. All these by me were wrought."

Are splendid palaces, pavilions, pleasure gardens, fancy ponds, and wondrous vestments such things as one would naturally expect to find predicated of the aboriginal tribes, as the Asuras are called,¹ and cities stretching far

¹ Cf. Fausbøll's *Indian Mythology*, p. 1, and again p. 41.

and wide with lofty ramparts? Certainly not. Neither have we any specific evidence for them as every-day occurrences among the Hindus at any early period, save one. Indeed, that they were not commonplaces is sufficiently clear from the Epic ascription to supernatural power. One does not invoke the genii to explain the matter-of-course.

But there is one period of Indian history and one Indian Court where definite evidence exists for just these things. I quote Vincent Smith's *Early History*, which says¹: "The buildings [of Chandragupta's Court] stood in an extensive park, studded with fish-ponds and furnished with a great variety of ornamental trees and shrubs . . . gorgeous embroidered robes were to be seen in profusion, and contributed to the brilliancy of the public ceremonies. When the King condescended to show himself in public on state occasions, he was carried in a golden palanquin, adorned with tassels of pearls, and was clothed in fine muslin embroidered with purple and gold . . ." Does not this English quotation from Curtius and Strabo sound curiously like the *Mahābhārata*? The gorgeous palaces, the stretching city, and the lofty ramparts of Pāṭaliputra are also all more than adequately attested by Megasthenes. Thus really everything included by Maya in this inventory of his works is specifically evidenced for the Court of Chandragupta, except the caves. As regards these, however, let me note that, in the little artificial hill beside the terrace which Hiuen Tshang tells of, the pilgrim makes particular mention of *shu shih shih shih*, 數十石室, "several tens of stone chambers," which are palpable caves.²

In the natural hill east of the Persepolitan terrace are also caves, namely the royal tombs. The connecting link we owe to Dr. Marshall. He, studying afresh the oldest

¹ First edition, p. 115.

² Cf. Watters, *op. cit.*, vol. ii, p. 95.

caves in India, the Mauryan caves in the Barābar Hills, near Gayā, came to the conclusion, some months prior to my discovery of the terrace at Kumrahar, that the men who fashioned them betrayed familiarity with just these royal rock-cut tombs of Achæmenian Persia. Could better or more independent proof be wished? We have thus found some record for the existence at Pātāliputra of each and every thing in Maya's list, and some of these, the caves particularly, are known to have been exclusively of Persian character. This passage alone would almost warrant an equation between the Asura Maya and Ahura Mazda. But let us continue our examination of the Epic text, for now we come to passages of special interest and significance, in this same canto.

Maya has hitherto been pressing for permission to construct something for Arjuna to show his gratitude to him for having saved his (Maya's) life. There is possibly some historical allusion behind this also, if our knowledge were but adequate; but let it pass. Arjuna has declined the offer, so far as he is himself concerned, but ultimately yields to Maya's importunities to the extent of bidding him build something fine for Kṛishṇa. Kṛishṇa himself decides on a Sabhā—a Durbar Hall, or throne-room, we should say—and proceeds then to define his wishes in a vague and general way. He stipulates for a wondrous hall, one that no mortals could essay to imitate, one

यत्र दिव्यानभिप्रायान् पश्येम विद्वितांस्त्वया ।

आसुराब्जानुपांश्चैव तादृशीं कुरु वै सभाम् ॥¹

The interpretation of these words appears to me not easy. I cannot read them satisfactorily with any of the accepted meanings of *abhiprāyah*. How could any divine "intentions" or "purposes" be so "wrought" by Maya as to be literally "seen" in the Sabhā? The difficulty is increased if these "intentions" are to be, not only divine,

¹ M.Bh. ii, 1, 24.

but also such as appertain to Asuras and to mankind. It would seem to me that the word *abhiprāyaḥ* must contain some special meaning here, one perhaps long since forgotten. None of the meanings given in the lexicons accessible to me seem suitable, as not a single one is lucid or makes sense if taken literally.

But let us remember that *√i* with *abhi-pra* means "to go near to", "to approach", and then particularly, "to approach with one's mind". Does this not lead us legitimately to the idea of *conception*, in, let us say, the artistic sense? "Where we may see the conceptions of the gods and Asuras and men which thou hast formed" would appear a fairly literal and satisfactory rendering. In ultimate purport we might put it freely: "Where we may look on concepts of the gods, of Asuras and men which thou hast fashioned, a hall of this sort, prithee, build!" Roy has employed the word "design" in this passage. This is perhaps acceptable; but we may, for all that, be permitted to wonder in what sense he used the word. *Abhiprāyaḥ* in the meaning "artistic design, pattern figure" does not appear to have been recorded. But the extension is a natural one, in Sanskrit as in English, and I do not doubt but that we have this extended meaning here. But I do doubt if Roy intended so to use the word.¹ The reference appears to be to statuary, sculptured representations of figures divine, semi-divine, and human—thus providing an interesting sidelight on the still open question whether divine figures were sculptured in India previous to the Gandhāra school!

But can support be found for this proposed translation? I think it can, and to this end would cite the passage ii, 3. 31. Here the very hall for which Kṛishṇa is, as it

¹ Since writing the above I find that Böhtlingk on p. 1022 of his Dictionary, vol. v, among the addenda to ॐ, records *abhiprāya* in the sense of "Erscheinung, Phantom", with reference to M.Bh. 13, 2827, *tatra dītyān abhiprāyān dadarśa*, which is gratifying confirmation of my views.

were, giving his specifications in the previous passage, has been completed, and the text declares—

तां स तच्च मयेनोक्ता रचन्ति च वहन्ति च ।

सभामष्टौ सहस्राणि किङ्कुरा नाम राक्षसाः ॥

"There, by Maya bidden, eight thousand of the Rākshasas called Kinkaras did guard the hall and did uphold it."

And again, in the passage ii, 10. 3, the Sabhā of Kubera is described as

गुह्यकिङ्कमाना

"Upheld by Guhyakas."

Into association with these two citations I should like to bring the passage ii, 11. 14 ff. The South Indian text as published in Bombay reads thus:—

सम्येन च धृता सा तु शाश्वती न च सा चरा ॥ १४ ॥

दिव्यैर्नानाविधिर्भाविर्भासद्भिरमितप्रभैः ॥ १५ ॥

अति चन्द्रं च सूर्यं च शिखिनं च स्वयंप्रभा ।

दीप्यते नाकपृष्ठस्था भर्त्सयन्तीव भास्करम् ॥ १६ ॥

Roy translates this as follows: "It doth not seem to be supported on columns. It knoweth no deterioration, being eternal. That self-effulgent mansion, by its numerous blazing celestial indications of unrivalled splendour, seems to surpass the moon, the sun, and the fire. Stationed in heaven, it blazes forth as if censuring the maker of the day." I must confess that this does not appear to me specially coherent, although Fausbøll quotes it with seeming approval.¹ What precisely does "blazing celestial indications" mean? What is the connexion between the statements "it doth not seem to be supported on columns" and "it knoweth no deterioration, being eternal"? And does not Roy's rendering ignore the *tu* and disregard the construction with it?

¹ *Indian Mythology*, p. 73.

Fausböll's approval makes me hesitate, because I naturally dislike to challenge an interpretation accepted by so great a scholar; but I cannot avoid the suspicion that the text is here corrupt. A really critical edition of the *Mahābhārata* would, I feel sure, show us the *pāda śāsvatī na ca sā ksharā* placed differently, probably in closer association with the line *atī candram*, etc., where it would appear more relevant. That something has gone wrong with the text is even externally indicated by the fact that stanza 15 shows only one line. Something has apparently got left out, and the *śāsvatī*, etc., *pāda* has got misplaced. It appears to me that the *stambhair na ca dhṛitā sā tu* must be brought into connexion with the instrumental cases in that single line which now figures as stanza 15, and that in the absence of our missing *pāda* we should read *stambhair na ca dhṛitā sā tu divyair nānāvidhair bhāvair bhāsadbhīr amītaprabhāiḥ* consecutively.

For the interpretation of this altered text I need only state that among the meanings of *bhāva* we find "a being", "a living creature". A *being* in the sense of *bodily form* or *shape* is evidently what we need, and thus I take the passage to mean: "And neither is it upheld by columns, but by divers radiant heavenly beings of unequalled splendour." This brings me to my synthesis of all these passages. I take the poet to be referring, in all alike, to a type of throne-room or *Sabhā* familiar to his contemporaries, but now lost to human memory, in which the actual pillars, as merely structural necessities, were lost to the consciousness of the beholder by reason of his absorption in the symbolism of a different and more conspicuous feature. This feature was the literal presence of innumerable large sculptured representations of divine and semi-divine beings, so sculptured and disposed as to impress the beholder as actually supporting, on their upstretched arms, the various floors of the *Sabhā*, thus

justifying the description of the poet, *rakshanti ca vahanti ca*, where *√vah* has its simplest and most natural meaning of "bearing", or "upholding", literally.

It became, then, a matter of the utmost importance for my present thesis to observe that for tangible historical evidence for such a structure as the *Muhābhārata* describes we must have recourse to Persepolis. Nowhere in ancient India has there hitherto been any indication of a structure of this type. But on the sculptured face of the tomb of Darius Hystaspes, and, in abbreviated form, at the entrance, significantly enough, to his Sabhā, we see depicted a structure which in all ways precisely illustrates the meaning of the Indian Epic. This structure is the so-called Talar, an open, many-storied platform serving as a support to the throne, in which the several floors are apparently upheld by sculptured hosts representing, in this case, the nations subject to the King of kings.¹ It is the most striking sculpture at Persepolis, as it embodies a conception of astounding boldness and of magnificently imperial pomp and pride. The bas-reliefs display this conception in pictorial form, and in the absence of tangible evidences it is not strange that Persian archæologists have failed to follow so lofty a flight of the imperial Achæmenian mind, and have missed the actual existence at Persepolis of this Talar in structural form. Fergusson had the idea almost within his grasp, but he missed it by conceiving the Hall of a Hundred Columns to be merely a hall to support a Talar on its roof.² Even this conception has met with criticism, as partaking of the fanciful. But evidence has

¹ For illustrations cf. Curzon's *Persia*, vol. ii, p. 183, and again p. 176; Perrot & Chipiez, *History of Art in Persia* (Eng. trans.), p. 218, and again p. 396; Fergusson's *Palaces of Nineveh and Persepolis*, p. 181, and again p. 124; Stolze & Andreas's *Persepolis*, vol. ii, pll. 106-8, and vol. i, pll. 59, 60. The plate in Perrot & Chipiez is perhaps the best.

² *Palaces of Nineveh and Persepolis*, p. 180.

been found, at last, for believing not alone that the roof of Darius's throne-room did indeed sustain such a Talar, but that, moreover, the whole "hall" itself *was* such a Talar, on a colossal scale. The architectural monstrosity of a hall covering fifty thousand square feet of area internally, with an estimated height of only 25 or 30 feet, and no means of lighting, thus gives way before an architectural conception of surpassing grandeur.

And when I state that the evidence on which this altered restoration of Darius's throne-room is based has come from the stratification of Pātāliputra, and that the first Indian example of those peculiar edifices described in the *Mahābhārata* occurs among the palaces of Chandragupta Maurya at Kumrahar, which in other respects are described by the Greek historians in language almost identical with the *Mahābhārata* account of Maya's works, I trust that I am justified in stating with some confidence that the Asura Maya of India is indeed a reflex of the great Ahura Mazda.

(To be continued.)



VII

A KHAROSTHI INSCRIPTION

By F. W. THOMAS

ON p. 111 of *Ariana Antiqua*, under the heading "Tope No. 13 of Hidda", we read as follows: "This tope is situated on the brink of a water-course, more than a mile from the village of Hidda. In our progress towards the centre we fell upon a small earthen jar, enclosing a stone wrapped in tuz-leaves. This simple deposit was perhaps the most useful that any of the many topes examined had yielded, for it was encompassed with a Bactro-Pali inscription, written with a pen, but very carelessly. Fearful that this testimony might become obliterated, or suffer in its journey from Kabul, I copied it at the time as well as I could, under the hope that, if necessary, a transcript would be serviceable." Other references to the same find may be seen on pp. 60, 113, and 258-9.

This was not the only occasion when Masson discovered in topes which he excavated fragments or rolls of tuz-leaves, as he calls them, meaning birch-bark (see pp. 59-60, 84, 94, 116 of the same work). In some cases the rolls or "twists" were inscribed with Kharoṣṭhī characters; and it is specially unfortunate that they proved too brittle for preservation, since they would have been undoubtedly the oldest surviving specimens of Indian MSS.

To the inscription on the jar my attention was first drawn some years ago by finding among the fragmentary papers of Masson in the India Office Library (doubtless remains of the material from which *Ariana Antiqua* was compiled by Wilson) a number of attempts at decipherment of one or two Kharoṣṭhī inscriptions. Among them are the Māṇikiālā inscription and others which are quite

well known. Upon a re-examination about a year ago it appeared that there was one inscription which was not familiar, and I ultimately concluded that it had never been published. Although this was not the fact, it was not very far removed from fact: the actual publication was very imperfect, and, so far as I am aware, it has scarcely ever been noticed in print. An eye-copy (here reproduced) will be found, in fact, lithographed at the foot of the table of the "Arianian Alphabet" inserted opposite p. 262 of *Ariana Antiqua*. Its imperfection will appear upon comparison with the second photograph, which reproduces the most careful of Masson's copies together with his tentative decipherment: the superior exactness of the forms of the *akṣaras* in this second copy will in the light of our present knowledge escape no one. The eye-copy was mentioned in the Journal of the Asiatic Society of Bengal for 1863 (p. 144) by Cunningham, who read the date, in part erroneously, and the word *dharma* in l. 2, and by Dowson in this Journal for 1863 (pp. 230-1).

The inscription is in two lines, and the real commencement is not as in the facsimile, but with the 12th and 6th *akṣaras* from the left ends of the two lines respectively. I read as follows:—

1. 1. *sebatśarae aṭhavimśatiki. 20. 4. 4. mase ape (or pi)laesa stehi daśahim 10 iśe chuṇammi prastita(thā?)pita śarira [ra]javamtiimi thubami saghamvitrena navakarmiana*
1. 2. *ede(i?)na kaśalamule[na] eteśa dharm(mm?)ana lokika vija yaśa dharm(mm?)a khae badhosyeta śarira sarvasatva(ā?)na nirva(ā?)nasabharae bhavatu rajasa a(?)grī(ggra?)pracamya.*

That this reading presents a number of details open to discussion is sufficiently plain. And doubtless some points will remain uncertain, unless—which is not beyond the bounds of possibility—the jar itself should somewhere




come to light; it seems not to be in the Indian, or the British, Museum. In the meanwhile we may consider a few of the questionable matters.

1. *sebatśarae*. The vowel-sign over the *s* is, no doubt, an error in the copy: for the form *sambatśara* compare the Gondophares inscription and the Āra inscription of the year 40, edited by Banerji (*Indian Antiquary*, 1908, p. 58) and Lüders (Berlin Academy *Sitzungsberichte*, 1912, pp. 824-31).

2. *mase*. Read *māsa*, the *e* vowel being again due to error. Under the two *akṣaras* is a curved more or less horizontal line, of which nothing can be made. But for a second figure, which is attached to the bottom of the *ma*, a reason may be assigned. In the second line we miss after [kaśāla]mule the *akṣara na*, of which the figure has the shape: it is therefore probable that the figure was really intended for this *akṣara*, and was a correcting insertion above the line.

3. *apilaesa*. The second copy has *ape*^o.

4. *stehi*. In the second copy the reading is rather *daste*, or *naste*, due no doubt to a misreading of part of *ste* as *da*, or *na*: a third copy has clearly *stehi*.

5. *pratista(ṭhā ?)pita*. The second copy has *pratajasta(ṭhā ?)-pita*, and the published facsimile a slanting line, placed somewhat high up, following the *ti*. It seems probable that an original  (or ) was misread as . On *sta* and *ṭhā* see below (No. 18).

6. [ra]javanṭimi. Some of the manuscript copies, including the second here reproduced, insert before *ja* a *ra*, which may be a mere dittograph of the last *akṣara* of *śarira*. But probably it was really present in the original, and the word should accordingly be *rajavanṭimi*.

7. *Saḡaṇṃmitreṇa navakarmiaṇa*. The two successive *na*'s appear to differ in shape, which suggests that the former should be read as *ṇa*. The same form recurs in *chuṇami* and *ṇirvaṇa*: probably every non-initial *na* should be *ṇa* (see Dr. Konow in *Festschrift f. E. Windisch*, pp. 87-8). *Navakarmiana* (read ^o*enā*) is possibly a misreading for ^o*karmikeṇa*.

8. 1. 2. *eḍe(i ?)na*. The *de* resembles rather *ru*. In *kaśāla*^o the vowel of *ku* has been overlooked.

9. *dharmaya*. The *akṣara* read as *rma* might equally well or even better, in both cases, be *ṭa*, or possibly *ṭu*. Here only the sense can decide. Concerning *nma* see below (No. 18).

10. *lokika*. The facsimile is here quite unreliable, and the various manuscript copies diverge considerably. The photographed copies give *lobhibha*, which would be *lokika*.

11. *yaṣa*. The *ṣa* is probably a misreading for *śo*, from which it differs only slightly.

12. *badhosyeta*. Here we are left to conjecture. The *ba* might possibly be *ta*; but one is strongly tempted to suppose an imperfect reproduction of *bodhisvata* = *bodhisattva*, a word which has now been found by Mr. Marshall in his new Taxilā inscription (*supra*, 1914, pp. 987 sqq.). The *e* in *aye* may be erroneous, as in *sebatśarae* and *mase* above.

13. *sarvasatva(ā?)ya*. In the facsimile we read something like °*sapamāṇa*, and the second copy has °*ṣ*. Another copy has °*ṣ*; and, since the word required is not doubtful, I conclude that the original had °*tva* (or °*tva*; see below, No. 18).

14. *sabharāe*. No doubt *saṃbhavae* would be a possible reading; but Masson read °*bhara*, and the word *saṃbhāra*, "equipment," "means," gives a suitable sense. On *reā* see No. 18.

15. *agri(ygra?)pracaṃya*. For *a* the copies present an unintelligible form, which seems to contain a *y*. The *pra* might be *tiṇ*, and the *caṃ* perhaps *vaṃ*. We have a sufficiency of parallels to prove that the idea intended is that conveyed by the word *agrapratyaṃśa*, and we are free to choose between two suppositions: either there has been a misreading of *agra-pracaṃśa* (confusion of *ya* and *śa* being easy), or the inscription had employed a synonym, possibly *agrapracāya* = *agrapratyaṃśa*, in which the second member had the (rare) sense of "tribute", "share". On *aggra* see below (No. 18).

17. As regards the last double symbol in the facsimile, it plainly is a dittograph for the *la* which comes at the beginning of the line. Possibly it accounts for the missing *ya* after *kuśalamūle*.

18. The inscription being written with a pen, we are prepared to find in the forms of the characters resemblances to those of the early documents from Central Asia; and upon a reference to Professor Rapson's plate in the *Actes du XIV^e Congrès International des Orientalistes* (i, p. 213) such resemblances, e.g. in the forms to *ti* (*vinnaveti* and *yajeti*), will actually be

apparent. This emboldens me to recognize an *ā* in the horizontal stroke attached to the right of *rv* and *tv* in l. 2 (Nos. 13, 14 above) and perhaps to *thā* in l. 1 (No. 5 above). The mark is indeed differently placed and is also not slanting; but we might expect variation in detail. A reference to the same plate and p. 221 will explain the alternative *rma* and *mma* in No. 9; on *aggra* (No. 15) see *Epigraphia Indica*, ix, p. 142.

Accordingly, inserting marks of vowel length and *anus-vāras* and normalizing the nasals we arrive at the following reading and interpretation of the inscription:—

1. 1. *sa[ṇ]batśarāo a[t]thaviṃśatihi 20. 4. 4. māsa*
Apelāe[s]sa stehi daśahiṃ 10 iśe chaṇaṃmi pra-
ti[t]thā(stā?) pita[ṇ] śarīra[ṇ] rājavamti[ṇ]mi
thūba[ṇ]mi Sa[ṇ]ghaṇmitreṇa navakarmieṇa
1. 2. *edena kuśalamūlena eḍṣa[ṇ] dharmāṇa[ṇ]*
lokika - vijjā - yaśo - dharma - khae bodhisvata-
śarīra[ṇ] sarvasatvāna[ṇ] nirvāṇasambhārāe
bhavatu rāja[s]sa ugrapracaṇśa[ṇ].

"In the year 28, on the 10th day of the month Apellaios, on that date was enshrined a relic in the *stūpa* Rājavat (in a royal *stūpa*) by the *navakarmika* Saṃghamitra. Through this store of good works, in the lapse of these qualities, worldly knowledge, glory, and merit, may the relic of the Bodhisattva be a provision for Nirvāṇa, and may a principal share [of the merit thereof] fall to the king."

The tenour of the inscription being for the most part common form, and the king's name being unmentioned, the interest is here concentrated in the date. That the era employed is the same as that exemplified in the Wardak inscription of the year 51 (now edited by Mr. F. E. Pargiter in *Epigraphia Indica*, vol. xi, pp. 202 sqq.) will hardly be contested; and this is, of course, the era of the reign of Kaniṣka. Accordingly,

this record furnishes evidence for the rule of the Kanishka dynasty in Hidda, a place about 5 miles to the south of Jalalabad, in the 28th year of their era.

Concerning the language of the inscription the following points may be noticed :—

1. The spelling is, as is characteristic of Kushan inscriptions, highly Sanskritic: thus (a) the three sibilants are distinguished; (b) there is no loss of single intervocalic consonants, except that *ya* and *ye* appear as *e* (thus *apelaesa* = *apelāyasa*) and intervocalic *bh* as *h*—even *j* is preserved; (c) intervocalic tenues are not softened to mediae, except in the case of *thūba* (which occurs also in the Wardak inscription and may go back to a by-form **stumba*) and in *edena*; (d) conjunct consonants are not assimilated, except in the case of *ṣṭ* > *ṭṭh*, *kṣ* > *ch*, *ṣṭh* > *ṭṭh*, *st* > *ṭṭh*, *dy* > *jj*, *ty* = *cc*, i.e. in cases involving a sibilant or *y*.

2. In declension and conjugation there is nothing with which we are not familiar from other similar inscriptions. This applies, for example, to the double locative singular (in *-e* and *-ammi*), the locative (= instrumental) plural in *-hi*, and the verbal form *bhavatu* (instead of *hotu*).

3. As regards the form *navakarmiēna* (if the actual reading should not be *°karmikēna*), I am not prepared to admit a loss of intervocalic *k*. The matter is somewhat interesting, as it exemplifies a rather widespread phenomenon, namely, an apparent early disappearance of suffixal *k*. This is instanced in the Mathura inscriptions (see the edition in *Epigraphia Indica*, ix, p. 138), the Mānikiala inscription (*Kartiyasa*), and elsewhere. As there is no reason to presuppose for *k* in this position a special destiny, it seems probable that the forms go back to a type which was without the *k*, i.e. had for its suffix *ya* and not *ka*: thus *māhāsāṃghiya* is not derived from an earlier *māhāsāṃghika*, but is a parallel, and in type a more ancient, form. To this type belongs also *aṭṭhabhāgiya*; in the case of forms with a preceding vowel other than *i* (e.g. *poṭṭhaya* = *prauṣṭhaka*) we may recognize the influence of analogy. On this subject we may refer to Professor Lüders' remarks in the Berlin *Sitzungsberichte* for 1913 (*Epigraphische Beiträge*, iii), p. 991.

VIII

NOTES ON THE EDICTS OF ASOKA

By F. W. THOMAS

7. MUKHA—DĀNAMUKHA

THE phrase *ete ca aṃne ca bahukā mukhā dānavisagasi vyūpaṭā* = *ete ca anye ca bahukā mukhā* (masc.) *dānavisarge vyāpṛtāḥ*, occurring in Pillar Edict VII-VIII, 6, is rendered by M. Senart "these functionaries and others are my intermediaries: it is they who are occupied with the distribution of my alms . . ." (*Inscriptions de Piyadasi*, ii, p. 97), and it is explained (pp. 91-2) that the employment of the word *mukha* is similar to that of *dvāra* in the sense of "means" (separate Orissa Edicts, i, 3).

Bühler, in his edition of the Pillar Edicts (*Epigraphia Indica*, ii, 245 sqq.), adopts the translation "both these and many other chief officials are occupied with the distribution of gifts" (p. 272), suggesting in a note that *mukha* either has itself the sense (given in the lexicons) of "chief" or stands for the adjective *mukhya*, of which that is the ordinary denotation.

There are certain passages in the *Arthaśāstra* which suggest a modification of these views; they are as follows:—

(1) c. 22, p. 57:

इस्त्वश्चरथपादातमनेकमुख्यमवस्थापयेत् । अनेकमुख्यं हि परस्परभयात्परोपजापं नोपेतीति ॥

"Let him station elephants, horse, chariots, and foot under a plural leadership: for with plural leadership they are through mutual fear not liable to disaffection from outside."

This passage might be held to confirm the opinion of Bühler, since we actually appear to have the word *mukhya* in the required sense. But other passages will correct this impression.

(2) c. 27, p. 70:

वज्रमुख्यमनित्य आधिकरणं स्थापयेत् ।

"Let him (the king) arrange his officials' functions under many heads and as non-permanent."

The sense of "leader" is here still possible, but less persuasive.

(3) c. 34, p. 98:

स्वभूमिजनानां राजपश्यानामेकमुखं व्यवहारं स्थापयेत् । परभूमि-
जनानामनेकमुखम् ॥

"The traffic in home-produced royal merchandise he (the superintendent) should place under a single head; that in foreign under several."

(4) Ibid.:

पश्याधिष्ठातारः पश्यमुखमेकमुखं काष्ठद्रोण्यामेकच्छिद्रापिधा-
नायां निदधुः ।

"Let the superintendents of merchandise deposit the price realized by the merchandise in a single amount in a wooden vessel having one hole in the cover."

In the last passage it is clear that *mukha* means "head" in the sense not of "leader", but of "heading" or "sum"; and it is highly probable that the same sense should be recognized in the preceding passage also. This suggests further that in the two preceding instances the compounds *bahumukhya* and *anekamukhya* (if we are not actually to read *bahumukha* and *anekamukha*) are not to be resolved simply into *bahu* + *mukhya* and *aneka* + *mukhya* respectively, but should be regarded as derived by the *ya* suffix from *bahumukha* and *ekamukha* (naturally without alteration of meaning). In the *Yājñavalkya-smṛti*, ii, 203, where the phrase द्यूतमेकमुखं कार्यं is explained by the *Mitākṣarā* as meaning that "the gaming should be placed under a single head official", *mukhya* would, of course, be metrically unsuitable.

The exact force of *mukha* in relation to accounts may best be realized by taking note of its correlative, which

is *śarīra*. Thus, in the *Arthasāstra* (c. 14, p. 60) the various sources of revenue are detailed with the addition **इत्यायगरीरम्** "these are the body of revenue", and then a few headings are summed up by the phrase **इत्यायमुखम्** "these are the heads of revenue"; similarly we have *vyayaśarīra*. It may accordingly be suggested that, when Aśoka says that his bounties are superintended by many "faces" (*mukhā*), he does not mean exactly "many leaders" or "many intermediaries", but simply that the work should be in "many departments" or under many different officials.¹

The word *dānamukha* has been carefully discussed by M. Senart (*Journal Asiatique*, sér. VIII, tom. xv, pp. 131-4), who has cited the numerous inscriptions where it occurs. M. Senart remarks that it does not appear to be employed in conjunction with the name of the object given (as in *dānam thabho*, etc.), but that otherwise he observes no distinction in meaning from *dāna* simply. Since the expression is found in inscriptions upon objects to which it refers (e.g. the Bimārān vase and the Māpikiāla cylinder), as well as possibly otherwise (e.g. in the inscriptions of the years 68 and 102 and in those of Zeda and Shakardarra), we cannot suppose the meaning to be "representative" of the gift (which itself might be elsewhere). Hence it seems best to recognize a mere synonym for *dāna*, a misapplication of a technical term, "gift department," "gift heading," "gift account," under which the donation would be recorded in the accounts of the institution benefited. Or is it, after all, the inscription itself?

8. PALIGODHA—PALIBODHA

In Rock-Edict V the phrase *dhammamamahāmātā . . . dhammayutānaṃ apalibodhāye viyāpaṭā* is presented

¹ An analogous meaning may suit *Śikṣāsamuccaya*, p. 335, l. 14 :

एकतु धर्ममुखातु अनेका धर्ममुखानवबुद्धि चक्षेन ।

and *Abhidhammatthasāṅgīya*, ix, 6, *vinokkhamukhāni*.

by the different versions with several variations, as follows :—

Girnar :	. . . <i>dhammayutānaṃ aparigodhaya</i> (see M. Senart in <i>J. As.</i> viii, xii, p. 315) . . .
Khalsi :	. . . <i>dhammayutāye apalibodhāye</i> . . .
Shahbazgarhi :	. . . <i>dharmayuta apalibodhe</i> . . .
Mansehra :	. . . <i>dharmayuta</i> (or <i>tasa</i>) <i>apalibodhaye</i> . . .
Dhanli :	. . . <i>dhammayutāye apalibodhāye</i> . . .

M. Senart (i, p. 143) translates "to remove all obstacles in the way of the faithful of the true religion", and Bühler (ZDMG. xxxvii, p. 269; *Epigraphia Indica*, ii, p. 468) "with the removal of obstacles among my loyal ones".

The meaning assigned to *apalibodha*, "absence of obstacles," is held (Senart, i, p. 127; ii, pp. 137-8) to be justified by the expression *akasmāpalibodha*, "arbitrary obstacles, sc. imprisonment," in separate Edict I of Dhanli and Jaugada, and by the employment of the word *pali-bodha* in the Pali canon, where it is not uncommon.¹ To the variant *aparigodha* Bühler does not call attention; but M. Senart had already remarked upon it, and had pointed to the confirmation furnished by the *aparigudha[ya]* of Shahbazgarhi. Although this confirmation is removed by the later and more correct readings (*apalibodham*, Senart, *Journ. Asiatique*, viii, xi, 526; xii, 315; *odhe*, Bühler), M. Senart's caution against supposing a mere miswriting in the Girnar version must still be observed; for the word *patigodha* is given, though without a meaning, in the *Mahāvvyutpatti* (245, 122). It therefore demands a discussion.

The form *patigodha* does not seem to occur in Pali texts as at present edited. But it has fortunately been preserved to us, along with the participle *patiguddha*, in the Buddhist Sanskrit works excerpted by Śāntideva in

¹ See below, pp. 103-4.

his *Śikṣāsamuccaya* (ed. Bendall in *Bibliotheca Buddhica*, i, St. Petersburg, 1897-1902). I cite the passages :—

- (1) p. 50, ll. 14-15 : *Sāgaramati-sūtra* :

तं बोधिसत्त्वं वैयावृत्यपल्लिगोधे नियोजयन्ति. वैयावृत्यं बोधि-
सत्त्वेनावश्यं करणीयम् ॥

"They engage that Bodhisattva in the desire [or distractions] of service (or 'business') : service is indispensably to be undertaken by a Bodhisattva."

- (2) p. 100, ll. 3-4 : *Sarvadharmāpravṛttinirdeśa* :

बुद्धधर्माभियुक्तेन भवितव्यं रात्रिं दिवं धर्मपल्लिगुहमानसेन ।

"He must be earnest in the law of Buddha, with a mind day and night desirous of the law."

- (3) p. 105, ll. 12-13 : *Adhyāśayasamcodana-sūtra* :

बहुपल्लिगोधपल्लिगुहो . . . लाभसत्कारः ।

"Respect to acquisition . . . is full of the desire of many desires (or 'anxiety of many anxieties')."

- (4) pp. 108-9 : the same text :

अगौरवो भोति सदा गुरुणां पल्लिगोधमन्त्रेषु रतिं जनिता ।

"He becomes ever disrespectful of elders, having developed a pleasure in the incantations of desire (or 'self-assertion')."

- (5) p. 186, l. 10 : *Sāgaramati-sūtra* :

कामाहारपल्लिगुहस्य धर्मानश्रुतवतो

"Without having heeded dharmas, being greedy for (or 'distracted by') the life of desire."

- (6) p. 249, ll. 8-9 : *Pitāputrasamāgama* :

एवं बाह्ये ऽपि यदस्फुटमस्फुरणीयं रूपगतेनापल्लिगुहं सुषिरभाव-
श्चिद्रमयमुच्यते बाह्य आकाशधातुः ।

"So in the case of external things also what is unstruck, unstruckable, not disturbed by what is connected with colour, penetrable with the nature of a hollow, that is called the external ether-substance."

In some passages the implication of desire is self-evident, and it suggests at once an etymology connecting

the word with the root *grdh*. It does not take us long to discover that the word *parigrddha* actually occurs with identical meaning in the *Divyāvadāna* (p. 351, ll. 9-10):—

अहं तावद्गृहावासे परिरुद्धो विषयाभिरतस्थ ।

"Now I am keenly desirous of home life and attached to the world."

Paliguddha is accordingly a Prakrit aspect of *parigrddha*; and, since the normal noun from the root *grdh* is *gardha*, *paligodha* is a reformation upon the basis of *paliguddha*.

What, then, of the Pali *paligedha*? For this form also, with the meaning "omnivorous greed", is offered by the *Dhammasaṅgaṇī* (with *gedha*, 1059, 1136, and Mrs. Rhys Davids, *Buddhist Psychology*, p. 277). If we were tempted here to suspect a misreading, we should at once be restrained by the fact that the *Mahāvīryūtpatti* supplies a correct Buddhist Sanskrit equivalent in *parigredha*. No doubt, the participle *paligiddha* will sooner or later come to light.¹ But we have already sufficient evidence to convince us that the history of the words with which we are dealing is truly represented by the following scheme:—

parigrddha $\begin{matrix} \nearrow & \text{paliguddha} & \rightarrow & \text{paligodha} \\ \searrow & \text{paligiddha} & \rightarrow & \text{paligedha} \end{matrix}$

Linguistically this history presents a point of interest; for it shows that under some circumstances the change of *r* to *i* or *u* respectively was not due to the neighbourhood of a guttural (or labial), as has sometimes been thought, but is originally a matter of dialect.

The existence of the word *paligodha* being thus amply evidenced, it remains to inquire concerning its appropriateness in the phrase of the Edict. Now we must take note of the fact that the word *dharmayuta* = *dharmayukta* has been shown to denote, not "the faithful of the true religion" or "my loyal ones", but "the

¹ The un-compounded *giddha* is, of course, known.

officials of the *dharma* (or ecclesiastical) department" (*Ind. Ant.*, xxxvii, pp. 20 sqq.; *JRAS.* 1909, p. 467; 1913, pp. 387-91; accepted by Professor Lüders in his article *Epigraphische Beiträge*, iii, p. 995 = *Berlin Sitzungsberichte*, 1913, No. liii). The phrase *dharmayutānam apaligodhāya*, "with a view to absence of greed (or self-seeking) on the part of the *dharma*-officials," will be seen upon inspection to be quite unexceptionable.

This, however, is not all: it appears also that the sense of "absence of obstacles" is no longer appropriate; and this reminds us further of the difficulty of explaining how the meaning "obstacle", which is indeed supported by the Pali Dictionary, became attached to the word *palibodha*, a compound of *buddh*, "to be aware," with the preposition *pari*. We might find an intermediary in "circumspection", "caution"; but an examination of various passages suggests another course. In Fausböll's edition of the *Jātaka*, vol. ii, p. 95, the sentence

*Sāvattihyaṃ kira pañcasatā upāsakā ghara- (or gharāvāsa-)
palibodhaṃ puttadārassa niyyādetvā Satthu dhamma-
desanaṃ suṇantā ekato va vicaranti*

clearly means that

"In Śrāvastī five hundred *upāsakas*, having devolved upon their children and wives the *cares* of home (or of 'home life'), spent their time away listening to the Master's exposition of *dharma*".

Further, in the *Nettipakaraṇa* (ed. Hardy, p. 80), the sentence *yattha punabbhavo, tattha palibodho yattha palibodho, tattha pariyutthānaṃ* seems well to bear the rendering "where rebirth is, there is anxiety, where anxiety is, there is exertion". Accordingly it is with a sense of conviction that we find a Burmese scholar, who would have a traditional feeling for the proper nuance of meaning, rendering *palibodha* simply by "worldly cares" (*Compendium of Buddhist Philosophy, Abhidhammatṭha-saṅgaha.*, tr. Schwe Zan Aung, 1910, p. 53).

This is not, however, by any means the whole story. A comparison of the passages in the *Vinaya* which exhibit the compound *palibuddh* will show the following development of meaning: (1) "reflection", *palibodho vinicchayaatthāya* (Parivāra, xii, 2; cf. Pāc. lxvi, 1, lxxxiv, 1, Bhkñi-Pāc. vii, 1?); (2) "respect of some extraneous consideration" = Skt. *apekṣā*, hence "obstacle", *kenacī palibuddho hoti* (Pāc. xv, 2, xlix, 2); (3) "respect of something wanting" = Skt. *ākāṅkṣā*, hence "claim", *vara-seyyāso palibuddhanti* (Cull. vi, 10, 2, Pāc. xvi, 1), or "title", *āvāsapalibodha* (Mahāv. vii, 13; cf. Rhys Davids, *Vinaya Texts*, ii, p. 157 n., and note in the passage the occurrence of the words *sāpekkho* and *āsā*, "expectation").

Unfortunately, the new renderings "absence of anxiety", etc., for *apalibodha* seems to apply to the passage under consideration hardly¹ more satisfactorily than does the meaning "absence of obstacles"; and this is the more noticeable as in the following (adjacent) phrase, *baṇḍha-nabaddhasa paṭividdhānāye apalibodhaye mokkhāye*, it is quite appropriate; it is again appropriate in the separate Orissa Edict i, where *akasmāpalibodha*, "unnecessary anxiety," and *akasmāpalikilesa*, "unnecessary distress," are deprecated in dealings of officials with the people of the city—the people are not to be "disquieted or distressed", but there is to be a regularity of lawful administration (*samaya*). Shall we, then, suppose that the Gīrnar text, which correctly employs the two similar words in close conjunction, has been exceptionally faithful to the author's meaning, whereas in the other versions the *apaligodha* has been assimilated to the contiguous *upalibodha*? Or must we ascribe a confusion of the two words to the author himself, and by consequence to the usage of his time? That the latter supposition has something in its favour will appear from a reinspection

¹ In view of the fact that a few lines above the satisfaction (*hitamkha*) of the *dhammayutas* is contemplated, we might indeed make *apalibodha* here "absence of cause of discontent".

of the passages already cited and of certain others. The facts may be illustrated in a tabular form :—

<i>grhāvāse parigraddho</i> (Divyāv.).	<i>āvāsapalibodho</i> (Vinaya).
<i>āvāsamaccharī āvāsapaligedhī</i> (v.l. <i>bodhī</i>), <i>kulam.</i> , <i>kulap.</i> (Aṅgut. Nik. i, 66).	<i>gharāvāsapalibodha</i> (Jātaka). <i>kule gaṇe lābhe āvāso pali-</i> <i>bodhe</i> (Milindapañho, p. 388).
<i>bahupaligodhapaliguddho</i> . . . <i>lābhasatkārah</i> (Śikṣās.).	
<i>kāma-rāga-vinivesa-vinibandha-paligedha-pariyuṭṭhāna</i> (Aṅgut. Nik. i, 66).	<i>yattha punabbhavo, tattha palibodho, yattha palibodho, tattha pariyuṭṭhāna</i> (Nettipakaraṇa).
<i>yad</i> . . . <i>rūpagatenāpaliguddham</i> . . . <i>ayam ucyate</i> <i>bāhya ākāśadhātuh</i> (Śikṣā-samuccaya).	<i>ākāso alaggo asatto appatitṭhito apalibuddho</i> (Milindapañho, p. 388).

These parallels show an extensive similarity of application in regard to the two words, sufficient to excuse the inditer of the edict, if he failed to distinguish them. But still there are certain considerations to be set on the other side. It will be observed that the Pali, in which the similarity of the two words is less overpowering (*paligedha* and *palibodha*), perhaps does not confuse them; for the sense of "desire" or "greed" it reserves the former, while the latter is confined to that of "trouble", "anxiety", or "claim". It is only in the Buddhist Sanskrit that the ether is called "free from greed", whereas in the Pali it remains "untroubled", "calm". The confusion, therefore, is on the side of the dialects which change *r* to *u*, and could not be ascribed to the writer of the original Māgadhi text. If, therefore, the confusion was realized (as appears) at Shahbazgarhi and Mansehra, we do not find it unnatural (even irrespective of the similarity of *go* and *bo* in the Kharoṣṭhi script); while its absence at Gīrnar is all to the credit of that careful text and scarcely consonant with a supposition of the original author's error. How, then,

are we to account for its presence at Khālsi and Dhauḷi? Here, perhaps, we may reflect that it is inadvisable to know too much; but at least we may remark that the misunderstanding is in these two cases more extensive than elsewhere, since it has metamorphosed also the preceding *dharmayutānam* into *dharmayutāye*, a sufficient indication that the sense of the passage was not understood.

On the whole the probability seems to be that the original text is best represented by the Girnar version.

Regarding the form *paligodha* we have taken note of a point of linguistic interest. A second matter of the same nature arises in connexion with the two words jointly. In both we have evidence of the *l* (for *r*) outside the Māgadhī sphere, namely, at Shahbazgarhi and Mansehra. This reminds us of the fact that an affinity between an Indian *l* and the gutturals and labials (here *g* and *b*) is a familiar idea to comparative philologists.¹ A more general interest attaches to the fact that Buddhism has in *palibodha* a technical expression for the cares of the world, which Christianity deprecates under the term *μέριμνα τοῦ αἰῶνος*.

We have now spent perhaps sufficient time in the company of *paligodha* and *palibodha*; but the reader will admit that a rather large and complicated history lay behind the variation of a consonant in the Girnar text.²

9. ĀSVĀSA—VĪŚVASIKA

The words last discussed may remind us that the idea of "comfort", "composure", "freedom from anxiety" plays a considerable part in the Buddhist system. Thus the *Aṅguttara-nikāya* expounds (i, pp. 192-3) a group

¹ Darbishire, *Reliquia Philologica* (Cambridge, 1895), pp. 216 sqq.; Wackernagel, *Altind. Grammatik*, p. 221.

² The reading *paligodha* was defended by Pischel, GGA. 1881, 1890, and Michelson, JAOS. xxxi, 244 (also Johansson, see ref.), upon the basis of a derivation from *y guth* or *gāh*.

of four *assāsas*, and in another passage (iv, pp. 184-5) it is emphatically said—

ahaṃ hi Sīha assaṭṭho paramena assāsena assāsāya dhammaṃ desemi, tena ca sāvake vinemi.

"For I, Sīha, being composed with the uttermost composure, teach a *dharma* leading to composure, and therein I train my disciples."

So in the *Samyutta-nikāya* (ii, p. 50)—

na hi nāna so āyasmā imasmiṃ dhammavinaye assāsaṃ alaṭṭhāti.

"For surely His Reverence has not in this *dharma*-training acquired a composed confidence."

In this latter passage we seem to detect a tendency to a transition from the idea of composure to the quite proximate conception of "settled conviction".

In the Edicts of Aśoka, where forms from the verb *āśvas-* are several times recorded (see M. Senart's index), I do not trace any technical application: the synonym *anudvigna*, "undisquieted," occurring in the vicinity, remains in the same sphere of ideas. But it is perhaps worth while to notice that another compound of *śvas*, namely, *viśvas-* (*viśvāsay-*), is employed in the Sārnāth Edict (ed. Professor J. Ph. Vogel in *Epigraphia Indica*, viii, pp. 166-72, esp. 170) with the meaning of producing familiarity, or certainty, in regard to a document.

Inscriptions of other provenance give evidence of a special application of a term derived from *viśvas-*. This is *viśvasika*, which is several times found (see Professor Lüders, *List of Brāhmī Inscriptions*—supplement to *Epigraphia Indica*, vol. x—index) as the name of an official in the Buddhist order. Do we here recognize a general or a special sense? Is the *viśvasika* an expounder of texts, a confirmer of faith? Or is his office simply that of consoling persons in trouble?¹ Against

¹ The former sense suits better the compound with *vi*; and in both cases the *d* needs explanation.

the former supposition we may set the fact that the business of instruction would more probably belong to another official, who is entitled *dharmakathika*, "expounder, or narrator, of dharma." If we hesitate to believe that the Buddhist order appointed a special brother to administer consolation, it is opportune to remember that *śokavinodana*, "dispelling sorrow," was the topic of a class of writings—an example exists in the Tanjur, ascribed to Aśvaghōṣa; in the *Harṣacarita* of Bāṇa the Buddhist recluse *Divākaramitra* is implored to console the widowed and afflicted princess Rājyaśrī *śamvucitāḥ samāśvāsanaḥ*, "with the customary consolations," called also in another passage *śokāpanayanopāya*, "He will guide our pious sister into the path of wisdom by the good words of Sugata, which pierce the mists of sorrow, and by his own wise counsels, illustrated with apt examples and weighty with various sacred texts" (Translation, p. 245). The ascetic subsequently (pp. 254-7) complies in a pathetic address. We may remember that in Latin also we have the *Consolatio*, based, no doubt, upon some Greek model.

An interesting discussion might be made concerning minor literary species in Sanskrit which are hardly noticed in the histories of the literature. But I must surrender the subject to Professor Lüders, who, I understand, has long had in manuscript an article dealing with it, and to whom, indeed, the first recognition of the Sanskrit *Śokavinodana*, or *Consolatio*, is due (ZDMG. lviii, pp. 707-14). We may, however, instance the Epistle (e.g. the *Suhrlekha* of Nāgārjuna), the letter (*lekha*), the Friend's Counsel (*Hitopadeśa* in Sanskrit and—a quite different type—in Pali), and a species of the latter, the address of advice and exhortation to the young (an example in the *Kādambarī*, ed. Peterson, i, pp. 102 sqq., translation by Miss Ridding, pp. 76 sqq.); also the parody.

10. SAṂSARAṆA

In the Sārnāth Edict discovered by Mr. Oertel and excellently edited in *Epigraphia Indica* (viii, pp. 166-72) by Professor Vogel the sentence

*hedisā ca ikā lipi taphākamtikaṃ hūvā ti saṃsalanaṇi
nikhita*

has been translated as follows :—

"Not only has such an edict been laid down (by me) for you that you should remember 'So be it!'"

Here the word *saṃsalana* has been, with the concurrence of Professor Kern and Dr. Bloch, regarded as equivalent to *saṃsmaraṇa*, "remembrance," an equation to which in itself no objection can be taken. Nor, again, is there anything not consonant with Sanskrit style in the expression "deposited, or laid up (*nikṣipta*), in memory".

What first arouses a suspicion is the use of the words *hedisā ikā lipi*, "an edict like this," which seems to denote a second copy of the edict; and this suspicion is confirmed by the immediately succeeding sentence—

ikaṃ ca lipiṃ hedisam eva upāsakānamtikaṃ nikhipātha.

"And an exactly similar edict you are to deposit in the vicinity of the *upāsakas*."

For clearly the rendering "But you must also lay down exactly such an edict for the lay-members" disregards not only the *ikaṃ . . . hedisam eva*, but also the meaning of *amtikaṃ*, and is inappropriate to the status of *upāsaka*.

This is really decisive: the *saṃsalana* must be a place, and the Edict is to be deposited, or set up, therein. It remains to inquire what evidence can be found as to the fact and as to the character of the locality. Naturally we turn to the *Vinaya*, and we are not long in finding (*Cullavagga*, vi, 3. 4, pp. 152-3, of vol. ii of Professor Oldenberg's edition of the *Vinaya*) a passage dealing

with *mañcas*, "bed," *pīṭhas*, "chairs,"¹ *ālindas*, "terraces," *praghāṇas*, "vestibules," in the Vihāra and ending—

*tena kho pana samayena vihārā anālindakā honti apatissa-
raṇā . bhagavato etam aṭṭham ārocesum . anujānāmi
bhikkhave ālindam paghaṇam pakutaṃ osarakam ti .
ālindā pākato honti, bhikkhā hiriyaṃti nipajjitum,
anujānāmi bhikkhave saṃsaraṇakīṭikam ugghāṭana-
kīṭikam ti.*

"At that time, again, the Vihāras were without terraces, without approaches (?). They reported the matter to the Blessed One. I allow, Bhikṣus, terrace, vestibule, antechambers, and covered ways. The terraces are public, the Bhikṣus are ashamed to lie down. I allow, Bhikṣus, those made with *saṃsaraṇas*, made with doors (?)."

What the *saṃsaraṇa* is does not clearly appear;² but in connexion with the terrace (*ālinda*), we are naturally reminded of the *samosaraṇas* of the Jain Tirthaṃkaras, which are illustrated and considered in Dr. Hüttemann's "Miniaturen zum Jinacarita" (*Baessler Archiv*, iv, 2, 1913) and in Dr. A. K. Coomaraswamy's "Notes on Jaina Art" (*Journal of Indian Art and Industry*, xvi, No. 127, 1914). Indeed, the word *saṃsaraṇa* is given by the *Mahāvīyulpatti* (223. 93) next to *prāghāra*.

The etymology would suggest a place for walking about, a lobby. But then our thoughts turn to the *caṅkrama*, or walk, which in the case of Buddha is figured at Sānchī as a triangular promenade.³ Whether students of architecture would be prepared to admit the possibility of Asiatic connexions with our ecclesiastical edifices, I am not in a position to say—the researches of M. Foucher and the Central Asian discoveries have of late years opened out

¹ I had almost omitted the *bhittikīṭa*, "peg in the wall," the *civara-
raṇṇu*, "loop for the *civara*," and even the *civaraṇṇas*, "pole for the
civara," quasi "hat and coat stand".

² In Sanskrit the dictionaries give the sense of "main street".

³ See M. Foucher's *The Beginnings of Buddhist Art*, etc., pp. 93-4.

many new possibilities. But an analogy at least may be seen in the cloisters of our churches and colleges.

It will be observed that in the *saṃsaraṇa* is deposited only the monk's copy of the edict, the first sentence relating expressly to a Saṅgha of Bhikṣus (in Pāṭaliputra). For the *Upāsakas*, who presumably are not regarded as living in the Vihāra, or at any rate as using the *saṃsaraṇa*, facilities for seeing the edict are to be provided elsewhere.

Accordingly, the following translation may be proposed : " In order that a similar edict may be within your reach, it has been deposited in the *saṃsaraṇa*. Do you also deposit a similar edict within reach of the *Upāsakas*."

This same edict contains two other points of interest. The first concerns the disrobbing of the schismatic brother and giving him two white robes (*odātāni dūsāni*) in place of the monk's yellow. This practice having already been evidenced from the Pali by Professor Neumann (*Dīgha*, trans. ii, p. 243; cf. *Culla*, v, 21, 2), we need not dwell upon it here.

The second point is in connexion with the interpretation of the words *vivāsayātha* and *vivāsāpayātha*. I find a difficulty in following the editor and others in holding that these pronouncedly causative forms " can hardly have a causative meaning". In the almost identical sentence of the Rūpnāth Edict the form employed is a non-causative *vivasetaviya*. The word is one which enjoys a high prestige for difficulty, and to which, since doubts are still entertained by some scholars, I trust to be able to recur in a further instalment of these notes.

In this particular edict, however, there seem to be grounds for a clear decision. For what is the sole subject of the rescript? Expulsion from the Saṅgha, we answer, on grounds of schism, and publication of the decree to that effect. How, then, is the matter introduced? " Whoso, Bhikṣu or Bhikṣuṇī, divides the Saṅgha, he is to be arrayed in bright robes and—*anāvāsasi āvāsayaṇe*—made

to dwell in a place which is not a residence (of monks, *āvāsa*).” When we meet the verb *vivāsay* at the end, after an interval of a few lines, can we resist concluding the edict (partly in agreement with Dr. Bloch) as follows?—

āvatake ca tūphākam āhāle savata vivāsayāthā tūphe etenā viyaṃjanena. Hem - eva savesu koṭavisavesu etenā viyaṃjanena vivāsapayāthā.

“As far as your administration extends, you are everywhere upon this intimation [and without further orders; cf. JRAS. 1914, p. 391] to expel. Likewise in all the districts of the forts [of local chiefs, whose intermediacy accounts for the double causative *vivāsapay*-] you are upon this intimation to require expulsion.”

11. PRĀDEŚIKA AGAIN

In our discussion of the word *prādeśika*, which was regarded as a synonym of *pradeśtr*, some reflection was occasioned by the long *ā*, for which two alternative explanations were propounded. It must be confessed that we have overlooked the simplest and most satisfactory of all. The form is derived from *pradeśa*, but from *pradeśa* in the sense not of “district”, but of “report”. We may again cite the *Arthaśāstra* :—

वैदेहकचञ्जनी वा सार्वप्रमाणं राज्ञः प्रेषयेत् । तेन प्रदेशेन राजा
मुक्ताध्यक्षस्य सार्वप्रमाणमुपदिशेत् (c. 39, p. 111).

“Or one disguised as a trader should send to the king the extent of the caravan; upon his report the king should inform the superintendent of octroi as to the extent of the caravan.”

The analogy of the expression *tena pradeśena* with the *etenā viyaṃjanena* of the preceding note will not escape the reader. *Prādeśika* is therefore a synonym of *pradeśtr* in the same way as “cavalryman” is of “cavalier”, i.e. it is a matter of date and secondary formation (*taddhita*).

(To be continued.)

MISCELLANEOUS COMMUNICATIONS

THE BUSHELL PLATTER OR THE TSIN HOU P'AN

No excuse need be offered for further consideration of the ancient bronze in the Victoria and Albert Museum which is known as the Bushell Bowl, for there is a great lack of information on the subject of Chinese bronzes, and anything that is written concerning this particular object is likely to help in supplying the deficiency. Professor Giles has pointed out the misnomer by which a platter (*p'an*) has come to be known as a bowl. It is not too late to make the necessary correction as I have done at the head of this article, and it is desirable that future writers should give the correct English name to this *p'an*.

My reason for writing concerning this platter is that during the winter of 1912-13 in Peking, while searching in an old book-store on Liü-li Chang, I came across a rubbing which I found to be one of the Bushell platter. As far as could be remembered by the owner of the store, this rubbing came into his hands through the late Yang Li-shan, a well-known connoisseur of a generation ago and the intimate friend of Dr. Bushell. Mr. Yang was a Metropolitan official, a rare scholar and an authority much in demand by the collectors of Peking. He had the entrée into the palaces of the Princes and was also sought by the Imperial Household Department in the classification of art treasures. He was a close friend of Prince I, and it was doubtless through him that Bushell secured this platter. Prince I was a careful collector of bronzes and pictures, and has left behind him a reputation for keenness in detecting frauds. I have seen three pictures which belonged to him and they were of genuine merit. He did not have a large collection of antique bronzes, and they

are now all scattered, Tuan Fang having secured a few of them, which I have seen. This small number of things from the collection of Prince I which has come to my notice has confirmed in my mind the truth of the opinion usually expressed in Peking art circles concerning the good judgment and careful habits of selection of Prince I. This platter, then, was owned by Prince I, a collector of good repute, it was known to Mr. Yang, a keen critic (even if, indeed, it was not sold through Mr. Yang to Dr. Bushell), and it passed into the Museum through Dr. Bushell, who is remembered as a cautious and well-informed connoisseur. These facts give strong presumptive evidence as to the intrinsic value of the platter and also as to its being in reality what Bushell claimed it to be.

The rubbing which I obtained is very clear. I have also a rubbing of the inscription of the San Shih Pan, a platter which is one of the most famous pieces now remaining in the Peking Palace (see *JRAS.*, April, 1912, p. 447). This platter of the San family is the best example of a bronze vessel of this shape of undisputed antiquity. A detailed comparison of the rubbings of these two platters could not fail to be instructive, but my present purpose is restricted only to a notice of the style and peculiarities of the characters of an inscription which is admitted by all critics to have been cast and not incised.

Professor Giles in *Adversaria Sinica*, No. 9, p. 293, has given a translation of a passage from the Tung Tien Ch'ing Lu of the thirteenth century as found in the Tu Shu Chi Ch'eng. Another slightly different version of what was evidently a common original has been published in vol. v of the *Encyclopedia of Fine Arts*—Mei Shu Ts'ung Shu—under the heading Ku Tung Ch'i K'ao (An Examination of Ancient Bronzes). I had made a translation of this for my own use before seeing that of Professor

Giles, and I will quote from my own translation. As to the two types of inscription—k'uan and chi—the author says, "the lines were fine like hairs and were even, regular and distinct, without a trace of being blurred. The characters were rounding like the surface of inverted tiles. They were not bold or deep. Both large and small characters had a uniform depth. . . . If vessels are now found with inscriptions blurred or cast in an irregular mould, these are the work of amateurs or imitators." A comparison of the inscriptions of the two platters shows at once that the inscription of the San Shih P'an agrees in every particular with the above standard of correct ancient bronzes, and that the inscription of the Tsin Hou P'an has many of the faults which should place it in the class of work done by "amateurs or imitators". The edges of many characters of the Tsin Hou P'an are rough, though this has been the result sometimes of recent attempts to remove extraneous matter from the surface in the hope of being able more easily to decipher the characters. The inscription is blurred in many places, there is an irregular depth of the characters, the inner surface is frequently not rounding but sharp, and the lines are often too coarse. It can be said without fear of successful gainsaying that the inscription of the Bushell platter shows at least that it was not the work of a skilful artizan such as the one who produced the perfect casting of the San Family platter. The workman was an amateur without doubt, but whether or not we should go further and classify him as an imitator of his own or a later age or as a forger of the T'ang, Sung periods, depends chiefly upon our own inclinations. For my own part, I do not think that any more definite decision can be made from the style of the inscription than that it is not of a high class. Some characters have every appearance of having been cast, and others bear the marks of incision. The style of the characters is such as of those used in the Chow dynasty, but of course these have

been constantly imitated during succeeding periods. The length of the inscription is most unusual, but it must be remembered that the size of the platter is also unusually large and the number of characters used is not greater in proportion to the size than in the San Shih P'an.

The veneer that has been plastered over the surface of the platter proves nothing more than the desire of some possessor to preserve his specimen, and does not help us to any decision as to age. While I do not believe that anything can be definitely determined about the inscription further than that it is poor workmanship, I cannot refrain from expressing my inclination to believe that the inscription was originally cast by a bungling artisan who was unsuccessful in his work, and that it was completed by incision. In no other way can I account for the dissimilarity in different parts of the inscription. This theory seems to be the only one sufficient to cover the existing facts. There are some characters which, if considered by themselves, would pass all the severe tests of having been cast, whereas other characters reveal at once the trace of the tools with which they were incised. It is the kind of work which might be expected from an inferior but ambitious artisan.

The translation of the inscription has been done sufficiently well, and I do not propose to discuss the relative merits of the versions of Bushell, Chavannes, Giles, and Hopkins. Nothing can be learned from the facts given in the inscription to help us in determining the age of the platter. There is only one thing to which I think reference should be made, and that is concerning the identification of character No. 512. The identification made by Yuan Yuan and Wu Shih-fên is *li*, and the character may be seen as the last one on the reproduction of the San Shih P'an rubbing. *Li* is a generic term according to Po Ku T'u, as was also the term for tripod, *ting*. A *p'an* or platter would be correctly included under

this genus—*li*, and there need be no hesitation in adopting this as the correct identification. There is no necessity of going so far afield as Mr. Takeda and Mr. Chalfant have gone in trying to identify it as an archaic form of *lung*, farmer. The use of *li* on the two platters is perfectly correct.

As to the platter itself, I was able, through the kindness of Mr. A. J. Koop, to make a careful examination of it on the afternoon of February 10, 1914. The *p'an* was taken from its glass case and placed in the room of the Curator, where I was given every opportunity of handling it. I compared the rubbing with the platter, and found it to be identical in size. I then submitted the platter to the tests used by the Imperial Household Department of the late Manchu dynasty. (1) As to the patina, it is chiefly of dark brown or russet colour, though there are a few spots of low olive colour. It is the patina which vessels take on that have not been buried in the earth for any great length of time, or of vessels that have been buried in dry soils. (2) The sound given out when the platter was struck was clear and not confused like that of Sung bronzes. (3) When rubbed briskly with the palm of the hand there was no rank odour, as is the case with bronzes of the Tang and Sung period. These tests, together with those based upon my own personal experience in the observation of many specimens of undisputed genuineness, led me to the conclusion that this platter belongs to the latter part of the Chow dynasty, and that Dr. Bushell was approximately correct in assigning it to the seventeenth century A.C.

The workmanship of the decoration of the platter is on an equality with that of the inscription. It is of inferior quality. The touch of the artisan was not deft, but clumsy. He cared more for size than for good work. The result was that he produced a platter which could never have been considered of great artistic or literary value. In my opinion it is a genuine specimen of the latter part of the

Chow dynasty, but is not a good specimen of a superior workman. It is in a different class from the San Shih Pan of the Peking Palace, or the Ch'i Hou Pan of the late Shên Pao-hsi, which is now in the Metropolitan Museum, New York.

JOHN C. FERGUSON.

THE POETRY OF MUTANABBI

In the opinion of most Arabic-knowing scholars in the East, Mutanabbi holds the highest rank among all Arabic poets, yet in the estimation of European scholars he takes a very low place, compared with the pre-Islamic bards or with such later poets as Abul-'Atahiya and Abul-'Ala Al-Ma'arri. Like the Persian poet Anwari, he suffers from the fact that all his poems are in the *qasida* form, which both from its length and mechanism and conventional style happens to be particularly unattractive to European critics, while their subject-matter is both wearisome and irritating, consisting, as they do, of unending repetitions of two themes, exaggerated praise of a complacent patron or unsparing and unseemly abuse of some person unfortunate enough to incur the poet's resentment.

Both Huart in his *Arabic Literature* and Nicholson in his *Literary History of the Arabs* have laid stress on the unattractive features of Mutanabbi's style, his affected mannerisms, and his accumulation of fantastic imagery, and the few passages selected by the latter author for translation, though characteristic of Mutanabbi on the whole, are more calculated to reveal the side of his poetry which is repulsive to Western readers than to suggest that, after making allowances for great differences in taste, Mutanabbi is really entitled to a high place among the poets of the East.

In the course of making recently a rough translation of the 6,400 odd *baits* of which the Diwan of Mutanabbi consists, I made a point of marking all lines which impressed me at the time as being notable, either from the sentiment expressed or the felicity of expression, and out of these lines, which I find numbered rather less than two hundred, I have picked out twenty, which are given below with a rough rendering into English. Most of the lines are gnostic or cynical in sentiment. Tastes differ so widely that it is not likely that any other selector would have taken many of my original choice, and probably even in picking from these the personal equation of the selector has played a large part.

Text

- | | | |
|----|---|---|
| 1 | فَلَا تَعَزَّزَكَ الْبَسِيسَةُ مَوَالٍ | تُقَلِّبُ بَيْنَ أَفْئِدَةٍ أَعَادَى |
| 2 | إِذَا الْفَضْلُ لَمْ يَرْفَعْكَ عَنْ شُكْرِنَا قِصٍ | عَلَى هَبَّةٍ فَلَفْظٌ فِيمَنْ لَهُ الشُّكْرُ |
| 3 | * تَصْنَعُوا الْحَمِيدَةَ لِجَاهِلٍ أَوْ غَافِلٍ | عَمَّا مَضَى مِنْهَا وَمَا يُمْسِقُ |
| 4 | فَنُفِىَ فِى الْبُيُوتِ كَالشَّمِّ فِى الشَّهْدِ كَاوِنًا | لِذَوَاتٍ بِهِ جَهْلًا وَفِى اللَّذَّةِ الْحَتَفِ |
| 5 | وَمَا إِلَيْهِ طَلَبٌ فِيمَهُمْ غَيْرُ أَتْنَى | بَغِيضٍ إِلَى الْجَاهِلِ الْمُتَعَاوِلِ |
| 6 | أَشَدُّ الْعَسَمِ بَصْدَى فِى مُرُورٍ | تَبْتَغِي عَشَّةَ صَاحِبِهِ انْتِقَالًا |
| 7 | وَقَالُوا هَلْ يُسَلِّعُكَ الشَّرُّ يَا | فَلَمَّا نَعِمَ إِذَا شُدَّتْ اسْتِفَالًا |
| 8 | * وَيُظْهِرُ الْجَهْلُ بَسَى وَأَعْرِفُهُ | وَالدُّرُّ دُرٌّ بِرَغْمِ مَنْ حَبَلَهُ |
| 9 | إِذَا كَانَ مَا تَتَوَبَّعُهُ فَعَلًا مُضَارِعًا | مَضَى قَبْلَ أَنْ تُلْقَى عَلَيْهِ الْجَوَازِمُ |
| 10 | يَجَلُّ عَنْ التَّشْمِيَةِ لَا الْكُفَّ لِحَّةُ | وَلَا هُوَ يَخْرُغَانِ وَلَا الرَّاى وَمُحْدَمُ |
| 11 | * كَلُّ حَلَمٍ أَتْنَى بِغَيْرِ اقْتِدَارٍ | حُجَّةٌ لِاجْتِنِ إِلَيْهَا السُّلُكُ |
| 12 | * وَلَمْ أَرِ فِى غُيُوبِ النَّاسِ ذَيْفًا | كَتَقَصِّ الْقَادِرِينَ عَلَى التَّعَامِ |
| 13 | * وَلَا تَشْكُ إِلَى خَلْقٍ فَتُشْمِتُهُ | شَكْوَى الْخَرِيجِ إِلَى الْغُرْبَانِ وَالرَّحِمِ |
| 14 | * لَعَنَتْ مُقَارَنَةُ الدُّلَمِ فَاثْمَا | صَيْفٌ يَجْرُ مِنَ النَّدَامَةِ صَيْفَانَا |
| 15 | الْقَائِلُ الصِّدْقُ فِيهِ مَا يَضُرُّ بِهِ | وَالوَاجِدُ الْحَالِثِينَ السِّرُّ وَالْعَنَنِ |
| 16 | وَكَاثِبَا ابْنِنَا عَدُوٌّ كَانَسَرَاهُ | لَهُ يَأْتِى حُرُوفُ أَلْسِنِيَانِ |
| 17 | بُلْبُسَتْ بِهِمْ بِلَا الْوَرْدِ يَلْقَى | أَنُوكَا هُنَّ أُولَى بِالْخَشَاشِ |

18 عَلَيْكَ إِذَا هَزَلْتَ مَعَ اللَّيَالِي وَحَوْلَكَ حِينَ تَسْعُدُ فِي هَرَاشِ
 19 * لَوْ كَانَ مُكْنَىٰ فِيكَ مَلَقَصَةٌ لَمْ يَكُنِ الدُّرُّ سَاكِنَ الصَّدَفِ
 20 مُعْتَلَةً حَتَّىٰ كَانَ لَمْ تُفَارِقِي وَحَتَّىٰ كَانَ الْيَاسُ مِنْ وَصْلِكَ الْوَعْدِ

Translation

1. Let not friendly tongues, inspired by hostile hearts, deceive thee.
2. When thy superiority raises thee not above the necessity of thanking a base man for a gift, the superiority lies with him who receives the thanks.
3. Life lies clear before him, who is ignorant or careless as to what has happened in it and what is expected to happen.
4. There is a sickness lying concealed in love, like poison in honey, of which I tasted in my ignorance, and death was in the taste of it.
5. As for pride, this is no habit of mine among them, except that I am in sooth a foe to every ignorant fellow who pretends to be wise.
6. To my mind the greatest of sorrow lies in a joy, the possessor of which knows surely that it will pass away from him.
7. They asked me, "Will he cause thee to reach as high as the Pleiades?" and I answered, "Yes, if I wish to sink lower in dignity." (*The poet means to suggest hyperbolically that his present position in the favour of the noble panegyrrized by him is higher than the dignity ironically alluded to by his critics.*)
8. He affects to show ignorance about me, though I know him well, and the pearl remains a pearl in spite of him who knows not its value.
9. When what thou intendest is but a verb in the aorist tense, it becomes a past verb before the signs of *jazm* can be attached to it. (*This line contains several plays on grammatical terms.*)

10. He is too great for any comparison: his hand is not an ocean (of beneficence), nor is he a lion, nor is his opinion a sharp sword. (*An allusion to some of the stock metaphors of encomiastic verse.*)
11. Every act of forbearance, which occurs without the power of exacting vengeance, is but a subterfuge to which the base resort.
12. I have seen nothing among the faults of men so grievous as the failure of those who had it in their power to attain perfection.
13. Make no complaint before the folk, whom thou wilt thus cause to triumph over thee, like the complaint of a wounded man before crows and vultures.
14. The companionship of the base is an accursed thing, for it is in truth a guest, which brings along repentance with it as an uninvited guest. (*The word ضيفن at the end of this line is the word which is the answer to the conundrum propounded by Hariri at the end of the 24th Assembly: وما وصف اذا اردف بالنون نقص صاحبه في العيون وقوم بالذون وخرج من المزبون وتعرض للذون.*)
15. He speaks the truth, even when it injures him to do so, and his two secret and outward states are both alike.
16. The two sons of the enemy, who serve to increase the number of his host, are but like the two letters of ي, which make up the word unaisiyan. (*This also is a grammatical allusion, the word given being the diminutive form of the noun انسان, made by inserting the letter ي twice.*)
17. I am afflicted with a calamity like that of the rose which is placed near to noses more fitted to have the nose-ring of a camel placed on them.
18. They attack thee when thou art made lean with the vicissitudes, and fight like dogs around thee (to get nearer to thee) when thou art prosperous.

19. If my sojourn in thee had been any injury to me, the pearl would not have remained within the oyster-shell. (*The poet means that he would not have accepted his uncongenial surroundings if his innate merit could have suffered thereby.*)
20. Thou art pictured in my heart, so that thou seemest never to leave me and it is even as if despair of union with thee constituted a promise of union.

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NOTE BY D. S. MARGOLIOUTH

The most famous collection of the wit and wisdom of Mutanabbi is that made by the Ṣāhib Ibn 'Abbād, who died 385 A.H. It is printed in the *Wasīlah Adabiyyah* of Husain Marṣafī, Cairo, 1292, ii, 67-79. An asterisk has been put against the lines in Mr. Dewhurst's collection which are also found in the 300 or thereabouts chosen by the Ṣāhib. No. 9 is taken by the author of the *Sirr al-Balāghah* as an illustration of the excellent rule that technical language should not be employed in poetry. A most interesting addition recently made to the printed literature on Mutanabbi is the *Wasāṭah bainā'l-Mutanabbi wa-Khuṣūmihi* of 'Alī b. 'Abd al-'Azīz al-Jurjānī, ob. 366, Ṣaidā, 1321. Perhaps I may also call attention to the *Ḥatimiyyah*, embodied by Yāqūt in his *Irshād al-Arib*, vi, 504-19.

PERSIAN AND ARABIC WORDS IN THE SATSAI OF
BIHARI LAL

In the course of revising a translation of the Satsai of the Hindi poet Bihārī Lāl, which I made in 1907, and which I hope, after following the Horatian maxim "nonumque prematur in annum", to publish soon, I have been struck with the comparatively large number of words of Persian and Arabic origin which appear with little or no change in this typical Hindi poem. If Doha No. 708

(Grierson's edition, Calcutta, 1896) be genuine, this work was completed on March 31, 1662, and in style and subject-matter the verses of which it consists are as far removed from Muhammadan influence as it was possible for them to be. The extent to which foreign words are used in such a poem at such a date is a striking indication of the penetrative power of the language of the Islamic conquerors.

The following list of words of Persian and Arabic origin occurring in the Satsat is, it is hoped, a complete one. The numbers given refer to the Dohas, 726 in number, in Grierson's edition :—

3. अकस *akas* (reflection) is the Arabic عكس.
16. सोर *sor* (fame) is the Persian شور. The same word occurs (683) in a different sense, meaning noise.
17. ताफता *tāftā* (twisted silk, taffeta), is the Persian تافته.
20. इजाफा *ijāfā* (increase) is the Arabic إضافة.
21. मुलक *mulak* (sovereignty) is a corruption of the Arabic ملك *mulk*.
- आमिल *āmil* (governor) is the Arabic عامل.
- जोर *jor* (force) is the Persian زور and occurs in three other Dohas (269, 278, and 554).
- रकम *rakam* (thing or article) is a corruption of the Arabic رقم *raqm*.
33. तरफ *taraph* (direction, towards) is the Arabic طرف.
56. किवलनुमा *kibalinumā* (a compass) is a corruption of the Persian قبله نما (قبله being, of course, Arabic).
61. फौज *fauj* (army) is the Arabic فوج, and occurs again in Doha 703.
- गोल *gol* (troop) is a corruption of the Persian غول.
73. गिरह *girah* (evolution) is a vulgarized form of the Persian گره *giriḥ*.
- कबूतर *kabūtar* (a pigeon) is the Persian کبوتر.

85. साबित *sābit* (proved) is the Arabic ثابت.
88. सिरताज *sirtāj* (a chief) is a corrupted form of the Persian سرتاج *sartāj*.
89. गरम *garam* (hot) is a vulgarized form of the Persian گرم *garm*.
94. हद्द *hadd* (extreme limit) is the Arabic حد *hadd*.
106. रुख *rukḥ* (face) is the Persian رخ, and occurs again in Doha 722.
117. दाग *dāg* (mark or brand) is the Persian داغ, and is found also in Doha 569.
127. कागद *kāgad* (paper) is a corruption of the Persian کاغذ, and re-occurs in Doha 402.
139. तमासे *tamāse*, inflected form of तमासा (a spectacle), is a corruption of the Arabic تماشا. The same inflected form is found again in Doha 719.
148. गुलाब *gulāb* (a rose or essence of rose) is the Persian گلاب. This word is of very frequent occurrence in the Satsai, being found also in Dohas 290, 382, 389, 476, 487, 539, 540, 548, 631, 632, 645, and 646.
151. तेज *tej* (swift) is the Persian तेज़.
- हजार *hajār* (a thousand) is the Persian هزار, and occurs again in Dohas 466, 527, 667, and 697.
187. चुगल *chugal* (a tale-bearer) is the Persian چغل.
189. खियाल *khīyāl* (thought) is a vulgar form of the Arabic خیال *khayāl*, and is to be found also in Doha 560.
193. हमाम *hamām* (hot bath) is a corruption of the Arabic حمام *hammām*.
212. गोद *goi* (ball) is the Persian گوی.
- चौगान *chaugān* (game of polo) is the Persian چوگان.
220. प्याले *pyāle*, inflected form of प्याला *pyālā* (cup), is a corruption of the Persian پیاله *piyālā*.

227. बेहाल *behāl* (senseless) is the Persian *بی حال*, and re-occurs in Dohas 330 and 660.
231. सबील *sabīl* (course) is the Arabic *سبیل*.
237. गीर *gīr* (catcher) is the Persian *گیر*.
248. सुमार *sumār* (counting) is a corruption of the Persian *شمار* *shumār*.
252. सिलसिले *silsile* (smooth) is probably a corruption of the Arabic *سلسله*, meaning a chain or series.
259. बलाय *balāy* (calamity) is a corrupted form of the Arabic *بلا* *balā*, and is found again in Dohas 261, 403, and 684.
269. लगाम *lugām* (bridle) is the Persian *لگام*.
275. नाहक *nāhuk* (wrongfully) is the Persian *ناحق*.
322. कालबूत *kālbūt* is a vulgarized form of the Persian *کالبد* *kālbud* (a form or figure).
329. गरीब *garīb* (poor) is the Arabic *غریب*.
निवाजिवौ *niwājibau* (to protect) is derived from a corruption of the Persian *نواز* *nawās* (protecting).
338. जुदी *judī* (separate) is a word obtained by treating the Arabic *جدا* as if a Hindi feminine form could be derived from it.
351. गरज *garaj* (motive) is the Arabic *غرض*.
353. हाल *hāl* (condition) is the Arabic *حال*.
खूनी *khūnī* (murderer) is the Persian *خونی*.
खुशाल *khushyāl* (happy) is a corruption of the Persian *خوشحال* *khushhāl*.
361. अदब *adab* (politeness) is the Arabic *أدب*.
382. सीसी *sīsī* (a phial) is a diminutive corrupt form of the Persian *شیشه* *shīsha*.
390. बदराह *badrāh* (evil-moving) is the Persian *بدراه*.
401. नमूद *namūd* (revealing) is the Persian *نمود*.
424. चशमा *chashmā* (spectacles) is the Persian *چشمه*.
This word occurs again in Doha 606, but is there written चसमा with the dental sibilant.
458. सिकार *sikār* (hunting) is the Persian *شکار*.

463. कजाकी *kajáki* (a marauding attack) is a corruption of the Persian قزاقی *qazzáqí* (the attack of a Cossack).
467. जिह *jih* (bowstring) is the Persian زج.
कमान *kamán* (a bow) is the Persian گمان.
481. नौक *nauk* (point) is the Persian نوک (*nok* in Old Persian).
नेजा *neja* (spear) is the Persian نیزه (*neza* in Old Persian).
491. जरी *jarí* (golden) is the Persian زری.
492. गुलुबंद *guluband* (a neck-band) is the Persian گلوبند.
503. कसरि *kasari* (a defect) is the Arabic كسر, used in its ordinary Indian sense.
509. बेपाइ *bepái* (footless) is the Persian بی پای.
510. हायल *háyal*, the meaning of which is given by the commentator as मायल (attracted), is probably a corruption of the Arabic هائل (terrible).
515. पायंदाज *páyandáj* (a foot-mat) is the Persian پای انداز.
524. फानूस *phánús* (a Chinese lantern) is the Arabic فانوس.
526. मोरचा *morchá* (rust) is the Persian مورچه.
534. सविहि *sabihi* (a picture or portrait) is a corruption of the Arabic شبيه *shabih*.
538. नाजुक *nájuk* (delicate) is the Persian نازک.
549. परी *parí* (a fairy) is the Persian پری.
550. दमची *dumchí* (lower part of the back) is the Persian دمی.
577. राह *ráh* (path) is the Persian راه.
580. जुराफा *juráfá* (a giraffe) is the Arabic زرافه *zuráfa*.
598. नरम *naram* (soft) is a corruption of the Persian نرم *narm*.
620. सोरा *sorá* (saltpetre) is the Persian شور.
- कपूर *kapúr* (camphor) is probably corrupted from the Persian کافور, and not derived directly from the Sanskrit कर्पूर *karpūra*.
628. गुमान *gumán* (pride) is the Persian گمان.

630. हवाल *havāl* (condition) is a corruption of the Arabic plural احوال.
631. बहार *bahār* (spring) is the Persian بهار.
634. सफर *saphar* (journey) is the Arabic سفر.
636. बाज *bāj* (a hawk) is the Persian باز.
645. आव *āb* (distinction) is the Persian آب.
647. अतर *atar* (scent) is a corrupt form of the Arabic عطر *itr*.
654. अहसान *ahsān* (generosity, benefit) is a vulgarized form of the Arabic إحسان *ihsān*.
660. बंद *band* (an embankment) is the Persian بند.
663. बलख *Balakh* (the city of Balkh) is the Persian بلخ.
685. कबूल *kabūl* (acceptance) is the Arabic قبول.
694. बहस *bahas* (discussion) is a corrupted form of the Arabic بحث *bahs*.
697. दरबार *darbār* (court) is the Persian دربار.
706. फते *phate* (victory) is a vulgar form of the Arabic فتح *futh*.
707. हुकुम *hukum* (order) is a vulgar form of the Arabic حکم *hukm*.

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TWO NOTES ON VEDIC RELIGION

In his recent treatise on *The Scapegoat* Sir James Frazer has made use, in support of his thesis of the fundamental character of early religion, of certain Vedic evidence. It is of interest to examine the use made of the material, in order to determine whether or not it can be regarded as valid, and whether the Vedic religion thus receives further elucidation.

The main thesis of Sir James Frazer in *The Scapegoat*¹ is that on the one hand it was customary to kill the human

¹ pp. 224-8.

or animal god in order to save his divine life from being weakened by the inroads of age, on the other it was customary to have a general expulsion of evils and sins once a year, and that by a combination of these two uses the dying god was employed as a scapegoat. After illustrating these ideas, the author examines in detail the sacrifices of the Mexicans,¹ which he considers as illustrating in special completeness the doctrine of deicide as a process of maintaining the life of the world, and finds in it the theory that death is a portal through which gods and men alike must pass to escape decrepitude and to attain the vigour of eternal youth. "The conception," he concludes,² "may be said to culminate in the Brahmanical doctrine that in the daily sacrifice the body of the Creator is broken anew for the salvation of the world." This conception is more precisely developed³ by reference to the Rgvedic⁴ theory of the origin of the world from the dismemberment of Puruṣa by the gods, and to the Brahminical theory⁵ of the repetition in the ritual of the mystic sacrifice of Prajāpati by which the world is continually anew created. The world is renewed by the sacrifice, and the priest who performs the sacrifice identifies himself in the act with the creator and by his act of sacrifice keeps up uninterrupted the revolution of time and matter.

The use made of the Brahminical theory of sacrifice is extremely ingenious and effective, but it remains to inquire whether it is legitimate. It must be remembered that in this theory we have no simple and naive statement of facts of ritual, but a very elaborate and artificial figment. The Puruṣa hymn of the *Rgveda* is one of the latest of that collection, as *inter alia* is shown by its mention of the four castes⁶ as such, while they are unknown

¹ pp. 275-305.

² p. vi.

³ pp. 410-11.

⁴ x, 90.

⁵ See Eggeling, SBE. xliii, pp. xiv-xxiv. The *Satapatha Brāhmaṇa* goes further in speculation than the *Taittiriya Saṁhitā*; see my translation of the latter text, pp. cxxvi seqq.

⁶ See Macdonell & Keith, *Vedic Index*, ii, 247-8.

to the collection as a whole. It is essentially one of the philosophic or speculative, not religious hymns of the *Samhitā*, and the speculation which it contains is not elsewhere found in the *Samhitā*, a fact which renders it extremely probable that it cannot claim to have been one of the generally current views of the process of creation. But the speculation which it embodies undoubtedly reappears in a much developed and improved form in the doctrine of the Brahmin schools, and in special of the *Śatapatha Brāhmaṇa*, summarized above.

This doctrine, however, cannot be treated as representing primitive belief. The Brahmins devoted the whole of their energies to the examination of the nature of the sacrifice, and their speculative activity took a wide range and resulted in many theories.¹ They thus developed the doctrine of the substitution² of the animal or cereal offering for the human, which, they argued, was the more primitive, and, again, they enunciated the doctrine of the efficacy of the sacrifice in the maintenance of the world. Their views on these topics are purely speculative, just as are those of Sir James Frazer, and they must not be treated as anything but conjectural explanations of what the priests found prescribed in a traditional ritual, much of which they themselves did not, it is certain,³ understand.

Now if the ritual itself, which the *Brāhmaṇas* explain, provided for the slaughter of a man and treated his dismemberment in the rite as the central fact of the sacrifice, then we would be tempted to see in the *Brāhmaṇa* explanations a clear exposition of the meaning of the sacrifice as it presented itself to the performers of the rite. It would even then not be possible to exclude the possibility that priestly theory might engender ritual,

¹ See Lévi, *La doctrine du sacrifice* (Paris, 1898).

² See e.g. *Śatapatha Brāhmaṇa*, i, 2, 3, 6, seqq.; *Aitareya Brāhmaṇa*, vi, 8.

³ e.g. the case of Makha, *Vedic Index*, ii, 116.

and that a sacrifice may not be really primitive, but at any rate the coincidence of ritual and theory would deserve careful examination. But in this ritual the speculation is based not on the slaying of a man, but on the building of a fire altar, the Agnicayana, which is formed so as to represent a bird or human shape, Prajāpati. It is essentially the formation of the altar that constitutes the creation of Prajāpati and the universe, of which the altar is the microcosm. This point is the more important in that the ritual does include the use of the heads of a man and four other victims,¹ which are required to make firm the foundation of the altar. It is, indeed, natural to suggest that the use of a human head is a relic of a formal human sacrifice, even although in the ritual as it is handed down the actual slaying of a man for the purpose is not normally contemplated. But admitting that a human life was used, it was not used for the purpose of slaying a decaying deity. The explanation of its use is the much more simple practice of burying a human being in the foundations of a building to secure a guardian of it.² That practice is of immemorial antiquity and of regular occurrence in India, and its rationale is intelligible enough. But in the slaughter of the victim in these cases there is no element to show that any divine character was assigned to the victim, still less that he was regarded as a prototype of Prajāpati. The head was that of some enemy slain in battle, or of some person killed by lightning or destroyed in some other manner indicating his slight value, and the real parallel to Prajāpati, the sacrificer, so far from offering himself up secures as the result of the sacrifice life lasting a full hundred years. There is no trace here of the conception of dying to live, or of a dying god. It cannot be too clearly realized that the dismemberment of Prajāpati is not his destruction.

¹ See Eggeling, SBE. xlv, pp. xxxviii-ix.

² See Keith, JRAS. 1907, pp. 943-4; Jackson, 1908, p. 533.

Prajāpati is a permanent prius, and the dismemberment is merely a change of form of what is inexhaustible. Thus the seeming parallelism of the rite to the cases of the dying god who again comes to life is purely imaginary. To the sacrificer death is not the portal to life, but the sacrifice is a means of prolonging his life indefinitely until its full term of 100 years. The human offering as a method of attaining immortality is not even suggested. The attainment of that end is due to the fire piling in the form of Prajāpati, and that consists in the arrangement of diverse bricks in various shapes and orders, and the depositing of a golden man as a symbol of Prajāpati. There is no evidence of this image being a substitute for a real victim.

In point of fact the conception of the dying god and his resurrection is not Vedic; for whatever cause that religion offers no real parallel to the Adonis-Attis-Osiris or even the Demeter-Persephone religious conception.¹ That a god should be actually sacrificed by men is clearly foreign to Vedic religious conceptions, and it is most improbable that the theosophic speculation of the origin of the universe from the sacrifice of Puruṣa is due in any way to the existence of a practice of slaying an embodiment of the god. On the contrary, it was surely one of the easiest conceptions for a body of sacrificing priests to arrive at, that the origin of the world, which their philosophy sought to trace to one source, was to be found in an action by the creator analogous to the action of sacrifice, and that the sacrifice should be performed on himself followed essentially from his solitude before creation took effect. So natural an explanation must surely have preference over one which assumes the existence of a state of religious belief of which there is no other evidence in Vedic religion.

The second point in which Sir J. Frazer appeals to Vedic authority is on the question of the 12 nights

¹ Cf. Keith, JRAS. 1907, pp. 929-49.

occurring about Christmas on which in Europe licence has often been permitted. He sees¹ in them the period intended to equate a year of lunar months (six of 29, six of 30 days = 354) to an ordinary year (365 or 366 days), and he finds that their unfixed condition as intercalary days tended to the reversal of all established morality. The days did not fit into the ordinary year, and though necessary were yet unaccountable, a theory which is a little difficult to follow, since if days were deliberately interpolated as is assumed, those who interpolated them can hardly have been ignorant of their nature. In them he finds a period of relaxation of moral rules after the winter solstice, when mock kings were allowed to reign, and this hypothesis he carries to a further point by arguing that the practice of interpolating a month every five years, which with Zimmer² he finds in the *Rigveda*,³ was in large measure⁴ due to the desire to eliminate the 12 days of misrule, although the 12 day reckoning would admittedly have been far more simple, convenient, and appropriate, instead of allowing 5 years to elapse before the year could be brought into order by the addition of a month.

As far as India goes this ingenuity is thrown away. The 12 days found in the *Rigveda*⁵ are the period when the Rbhus rested in the home of the sun-god, and the Rbhus, it is argued, are the 3 seasons, and therefore the 12 days fall at the end of the seasons, at the winter solstice. This is all pure and most improbable guess-work, and receives no countenance from sober scholarship⁶ or common-sense. Further, the year of 354 days is totally

¹ *The Scapegoat*, pp. 324-5.

² *Altindisches Leben*, pp. 365-70.

³ i, 164. 48; iii, 55. 18.

⁴ *Op. cit.* p. 343.

⁵ iv, 33. See Zimmer, *op. cit.* pp. 365-7; Hillebrandt, *Ritschalliteratur*, pp. 5 seqq.

⁶ See Oldenberg, *Religion des Veda*, p. 237; Macdonell, *Vedic Mythology*, p. 133; Whitney, *JAOS.* xvi, p. xciv.

unknown to the *Rgveda*, and only appears in the Sūtras.¹ Therefore, to suppose that the period of 12 days was used as an intercalation is absolutely unjustified. Finally, the use of an intercalary month every five years is also unknown to the *Rgveda*² or to any early text. In all probability when intercalation was begun it took the form of rough attempts to secure coincidence of the lunar and solar years by the intercalation of a month here and there, and not by adding 12 days, which implies a certain accuracy of approximation to a knowledge of the lunar and solar years of 354 and 366 days respectively, of which neither is known to early India.

A. BERRIEDALE KEITH.

THE SATURNALIA AND THE MAHAVRATA

Sir J. Frazer, in an interesting discussion in *The Scapegoat*,³ has argued that the Roman Saturnalia was originally a festival held in February or March, at which in primitive times in ancient Italy it was the universal practice, wherever the worship of Saturn prevailed, to choose a man who played the part and enjoyed all the traditional privileges of Saturn for a season and then died, whether by his own or another's hand, in the character of the good god who gave his life for the world. The hypothesis is interesting; if accepted it establishes an historical connexion between the Saturnalia and the modern Carnival, and links the Saturnalia with the festivals of Kronos in Greece which show some faint traces of human sacrifice.

The evidence, however, when carefully sifted, indicates that the attempt to explain the Saturnalia on the theory of the dying god is not one which can be accepted. The date is a most serious difficulty which Sir J. Frazer's

¹ *Vedic Index*, ii, 413.

² *Vedic Index*, ii, 412.

³ pp. 306-12.

ingenuity cannot remove. As he himself points out,¹ Livy² treats the date as being December as far back as 217 B.C., Macrobius³ also does not hint that the date had ever been changed, and there is not the slightest justification for the conjecture of a change of time, an expedient to which the author has resorted on other matters with equal lack of justification.⁴ He argues that it is strange that the festival of the god who presides over sowing should have his feast in December instead of February or March, when agricultural operations begin in Italy, and he points out that the last day of the modern Carnival, Shrove Tuesday, was up to recent times the customary season in Central Europe for promoting the growth of the crops by means of leaps and dances. But against all these theoretic considerations must be set the simple facts of the Mahāvratā of the Vedic Calendar. That rite⁵ was held at the winter solstice, i.e. in December; it was not a festival of sowing, but one intended to quicken the fertility of the earth, and one of its chief features was the dance of the maidens bearing pitchers of water. No one would expect that a Vedic rite, duly ordered by the Brahmins, would present us with the licence of the Roman Saturnalia as recorded in the texts of the Augustan and later periods. But even in the completely formalized version of the Vedic texts there are traces of an unexpected prominence of Śūdras. The maidens are *dāsīs*, female slaves, and an Aryan strives with a Śūdra over a skin which is shaped to be a symbol of the sun. The Aryan is, of course, victor, but the mere fact of the struggle shows the popular character of the rite, and its open and avowed fertility magic deepens the impression. That magic includes a dialogue between a Brahmacārin and

¹ p. 345, n. 1.

² xxii, 1. 19 seqq.

³ *Saturnalia*, i, 10.

⁴ See Prof. C. F. Lehmann-Haupt's criticism (cited at p. 415, n. 1) of the theory of the change in the date of the Crucifixion.

⁵ See Hillebrandt, *Rom. Forsch.* v, 309 seqq.; Keith, *Śākhāyana Aranyaka*, pp. 72 seqq.

a *hetaira*, a pale parallel of the licence of Augustan Rome. Nor can there be any doubt that the Saturnalia was, like the Mahāvratā, in its origin a fertility ritual, held at the winter solstice. The Carnival, on the other hand, while also intended to promote fertility, belongs to a different period, namely the rites of spring, and these rites have other characteristics than those of the winter solstice.

There is, however, one argument against this view of the equation of the Mahāvratā and the Saturnalia. The Mahāvratā contains no hint of the slaying of a god in the person of a human representative, a view which is very probably unknown to Vedic religion.¹ Nor does the Saturnalia in its classic form show any such rite, despite the full accounts preserved in various early authors. But in the accounts of the martyrdom of St. Dasius, on November 24, 303 A.D., made known by Professor Cumont, it is stated that it was the custom of the Roman soldiers at Durostorum in Lower Mœsia to celebrate the Saturnalia by choosing thirty days before the festival a young and handsome man who was clothed in royal attire, and who for the period of the feast was allowed to taste of every pleasure, but who was required to commit suicide on the altar of the god at the end of the period. From this it is deduced that the actual slaying of a representative of the god was normal in Italy and was only abolished by the advance of civilization, which left only the harmless practice alluded to in post-Augustan authors of choosing from the freemen a temporary king who could issue commands to the revellers.

Now this feature of the Saturnalia is precisely one which is not paralleled in the Mahāvratā and which is in all probability not ancient. The Saturnalia as we learn of it was a festival which had long undergone modification

¹ Keith, JRAS. 1907, pp. 929 seqq.; *Taittiriya Samhita*, pp. cxxxviii seqq.

in the development of the Roman religion, and had been strongly affected by its assumed reproduction of the golden age of Saturn. In the mimic kingship and in the reversal of the roles of slave and master we have a case of myth reacting on religion and ritual; the Mahāvratā reveals, beneath its elaborate form, traces of a very old and primitive fertility ritual in which the slaves naturally participate; the Saturnalia shows a development of this primitive form into a reproduction of the mythical Saturnian days, and we need not seek to hold that the king of the Saturnalia was ever a representative of the god or died in that character. It is not, of course, necessary to deny this character of the rite as practised in the year 303 A.D. when St. Dasius earned martyrdom by declining to play the part of the chosen victim; that this case is one of the instances of the relics of the slaying of a human embodiment of the god is at least possible, though we cannot say it is certain, and though it is clear that the soldiers did not perform the rite as the killing of a god, and cannot have known its real significance. But it is idle to argue from Lower Moesia and legionaries of 303 A.D. to the practices of Italy and Romans proper. In all probability the Saturnalia has in this case been contaminated with another ritual, and the facts shed no light on the original nature of the rite. It is contrary to all reasonable probability that no trace of human sacrifice should appear in any Augustan or post-Augustan author, had the Italians ever practised it in connexion with the Saturnalia, and it is clear that such a rite would have been wholly out of place with that merry festival with its representation of the golden age. Had such a sacrifice been known it would not have escaped the condemnation of the Christian Fathers,¹ who record other human sacrifices as practised at Rome. They

¹ Minucius Felix, *Oct.* 22, 30; Lactantius, *Div. Inst.* i, 21; Tertullian, *Apol.* 9; *Gnost.* 7, cited by Frazer, p. 312, n. 1.

record, indeed, an offering to the Latian Jupiter, and Sir J. Frazer suggests that at first this sacrifice took place on the top of the Alban Mount, and was offered to Saturn, to whom high places were sacred. But this is the wildest conjecture, and by means of such arguments anything could be equally well proved.

It must further be observed that unless the Carnival and the Saturnalia can be connected and the St. Dasius' version of the Saturnalia be accepted, it is impossible to find in the Carnival the slaying of a god in his human representative. The Carnival is marked by the burning of an effigy and by much fun and licence, and its time suggests irresistibly a popular festival in order to encourage the growth of the crops which are being sown. But the burning in effigy of the outworn corn spirit is no cogent proof of the burning of any human being in prior times in Italian lands, and the ritual of the Carnival does not therefore strengthen the argument as to the nature of the Saturnalia, even if the difference of dates was not fatal to the theory of the identity of the two rites. To burn an image is a perfectly simple magic rite, and to argue that the image is a substitute is to fall into the same fallacy as the Brahmins who argued that all sacrificial victims were substitutes for man.

Nor does the Greek evidence point to any real human sacrifice at the Kronia of a representative of the god. The Olympian Kronia held at the Equinox is unstained by any hint of such a sacrifice, and a bare mention in Porphyry¹ of a human sacrifice to Kronos at Rhodes in the month Metageitnion contains no hint of the divine character of the victim. And when we pass to the *Sacæa* of Babylon and the Jewish Purim, the wilderness of conjecture becomes yet more impenetrable, and still less light can be thrown on the origin of the Saturnalia. The *Sacæa* was held in

¹ *De Abstinentiâ*, ii, 54. It must be remembered that Porphyry's statements in this chapter cannot be accepted without great caution.

July,¹ not even in March like the Babylonian Zakmuk, with which Sir J. Frazer identifies it, or like the Jewish Purim, apparently, though not certainly, a borrowing from Zakmuk. It follows, therefore, that the elaborate argument² which finds in Mordecai and Esther as opposed to Haman and Vashti a relic of a ritual of slaying the human personification of the god and his revival rests on the weakest and least plausible grounds. But in any case to argue from an Eastern rite of spring to the Italian rite of the winter solstice is wholly inconclusive. We have the sure evidence of diversity of date, and against that difference can be adduced only vague and unsubstantial conjectures of identity of substance.

A. BERRIEDALE KEITH.

MALAVA-GANA-STHITI

Dr. Thomas has said (JRAS, 1914, p. 1010) that I adhere to my original interpretation of the expression *Mālava-gaṇa-sthiti*. That is not at all the case. My original rendering (quoted *ibid.*, p. 746, in my note on which he has commented) was "the tribal constitution of the Mālavas," in the sense of the event of some formal establishment of the Mālavas as a tribe.³ My amended translation (p. 747) is "the usage of the Mālava tribe."

That the term *sthiti* in the dates of A.D. 473 and 532 has the sense of 'usage, custom, practice', is shown plainly by the use of *āmnāta*, 'handed down traditionally', instead of it, in the recently discovered date of A.D. 405.

¹ See Frazer, p. 359.

² Frazer, pp. 365 seqq., 405-7.

³ In JRAS, 1914, p. 414, Dr. Thomas gave "the continuance [*sthiti*] of the tribal constitution [*gaṇa*] of the Mālavas" as being the "substance" of my original rendering. That does not represent my rendering at all properly: it was to *gaṇa-sthiti*, not to *gaṇa*, that I gave the meaning of 'tribal constitution': and I did not introduce the idea of 'continuance'.

As regards the term *gaṇa* in this expression, Dr. Thomas, without making any clear statement as to how he himself would translate it, disputes the rendering of it by 'tribe', which, by the way, has been given by others as well as by me, and says that I have not quoted anything to bear out this translation: to that he adds that the meaning 'tribe' is not, to his knowledge, given to it by any of the dictionaries, Sanskrit or European. I reply as follows. The word *gaṇa* is given in Indian lexicons, with many other terms, as, primarily, a synonym of *saṃāha* and *saṃghāta*, of which the radical and leading idea is that of 'a gathering together, a collection'.¹ Some familiar instances of its use and precise meanings are, *ahar-gaṇa*, 'a sum or total of days'; *ari-gaṇa*, 'a host of enemies'; *guṇa-gaṇa*, 'a number of good qualities'. In the case of Jain writings and inscriptions it has been rendered by 'school' and 'section';² and in the case of Buddhist writings by 'chapter, meeting, company, quorum'.³ Obviously, it has to be translated exactly in each particular case according to the context. If I and others have erred in translating it by 'tribe', we have done so in good company: the first meanings given to it in Monier-Williams' Sanskrit Dictionary are "flock, troop, multitude, number, TRIBE, series, class". But I maintain that there has been no error, and that, when the word is found in connection with names of peoples such as *Mālava* and *Yaudhēya*, the best rendering of it is 'tribe'; the word tribe being used, of course, in its ordinary general sense,

¹ Amarakośa (Bombay, 1896), p. 129, verses 39, 40 (twenty-two synonymous terms): Abhidhānāchintāmaṇi, verse 1411 (thirty-five terms), under which the editors, Boethlingck and Rieu, have explained all these terms by the German *menge*, which seems to mean a 'multitude, crowd, quantity'.

² "School", Jacobi, SBE, vol. 22, p. 288, note 2 (quoted by Dr. Thomas): "section", Lüders, List of the Brāhmī inscriptions, index, p. 215.

³ Oldenberg, SBE, vol. 13, pp. 175, 195; vol. 17, pp. 34, 38; vol. 20, p. 210.

not in any technical meaning which a pedant may assign to it as coming from the Latin *tribus* or on other theoretical grounds.

Questions raised by Dr. Thomas on p. 1012, as to my views about the nature of the connection of the Mālavas with the era of B.C. 58, are answered sufficiently by referring him to what I have written from time to time in this Journal. I have only to add that to state a date as "the year so-and-so according to the usage or the tradition of the Mālava tribe," that is, "in accordance with the reckoning followed by the Mālavas," is a quite sensible and appropriate method of dating.

As regards the Śuṅgas, their approximate period, B.C. 183 to 72 (Barnett, *Antiquities of India*, pp. 41, 42), follows from the statements in the Purāṇas, that the Mauryas ruled for 137 years and then the Śuṅgas for 112 (Pargiter, *Dynasties of the Kali Age*, p. 70), applied to B.C. 321 as the initial date of Chandragupta. But there is no evidence that they possessed Mālwā and those parts: on the contrary, the indications are that, after the time of Aśōka, the western parts of Northern India were split up into small kingdoms and tribal governments, and that the Śuṅgas were only a dynasty of Behār and that neighbourhood, whose territory did not extend on the west beyond Baghēlkhand.¹ This, however, is a separate question, not bearing on the translation of the expression *Mālava-gaṇa-sthiti*.

J. F. FLEET.

¹ Witness, in addition to numismatic evidence, (1) the Pabbosā inscriptions, which mention Rājas of Adhichhatrā; Lüders, *List*, Nos. 904, 905, and see this Journal, 1914, p. 89; and (2) the Besnagar inscription, which mentions the Rāja Bhāgabhadra; Lüders, No. 609, and see this Journal, 1909, p. 1055, and subsequent papers; there is no good reason for identifying Bhāgabhadra with either the Bhāgavata or the Bhadra or Bhadraka (with variants including Antaka and Andhraka) whom the Purāṇas name among the Śuṅga kings.

IRREGULARITIES IN THE PURANIC ACCOUNT OF THE DYNASTIES OF THE KALI AGE

In a note entitled "The Age of the Purāṇas"¹ Professor Keith has first referred to a piece of evidence that I cited² from Mr. V. Smith's *Early History of India*, and criticized certain views which I put forward regarding the Purāṇas in my *Dynasties of the Kali Age*. This part of his note really deals with the age of the Purāṇas. He has further taken the opportunity to criticize certain features of the dynastic account and also to refer to some points that were discussed in last year's Journal. This part of his note is really a distinct matter and has only an indirect bearing on the question of the age of the Purāṇas. It is impossible in a note to deal properly with the former subject, and I hope to do so as well as I can on a future occasion. Hence I leave that at present and consider only the second subject here; and where it is necessary to refer to last year's Journal the pages are cited within brackets.

As regards Professor Keith's criticism of my views in my book, I must ask those who think my views worthy of consideration to see exactly what I said there, because it is impossible in this note to deal fully with all his remarks and to restate my arguments. Hence only the more important points can be discussed here.

Three lines occur containing the word *bhaviṣye* with reference to the kings of the Kali age, and I pointed out that it could not from the context mean "in the future", but only "in the Bhaviṣya Purāṇa". He disputes this, and asserts that it means "in the future" (pp. 1023-4). The simplest proof would have been to give a translation of the lines, and this he has not done. The lines, freed from the comments in which he has enveloped them, are these:—

1. In the *Matsya* and *Vāyu* respectively—

tān sarvān kirtayisyāmi bhaviṣye kathitān nṛpān.

tān sarvān kirtayisyāmi bhaviṣye paṭhitān nṛpān.

¹ JRAS., 1914, p. 1021.

² Id., p. 745.

2. In the *Matsya*—

tasyānnavāye vaksyāmi bhaviṣye kathitān nṛpān.

3. In the *Matsya*, *Vāyu*, and *Brahmāṇḍa* generally—

bhaviṣye te prasankhyātāḥ purāṇa-jñaiḥ śrutarṣibhiḥ.

I invite him to give a plain and straightforward translation of these lines according to his assertion that *bhaviṣye* means "in the future"; and also to explain where these Purāṇas found those kings *kathita* or *pathita*¹; whether their general agreement in the account implies that they had a common source; if it does not, why the agreement exists; and if it does, what common source they could have had.

With regard to the phrase *bhaviṣya-jñair* (or *bhaviṣyaj-jñair*) *udāhṛtaḥ*, found in the *Vāyu* and *Brahmāṇḍa*, he says the *Matsya* answers all my reasoning (pp. 1023-4), but that is just what it does not do, because it avoids all comparison by using a wholly different expression *viprair gītaḥ purātanaḥ*, and therefore leaves my arguments untouched.

As regards dates, his statement of the facts and arguments that I put forward does not correctly summarize what I said; for example, about the date A.D. 458 in particular.² My own statement must be referred to. He seeks to explain the line *nava-varṣāṇi Yajñaśrīḥ kurute Śātakarṇikāḥ*, found in five MSS. of the *Matsya* by comparing it with the line about Senājit (p. 1025); but a comparison will show that they are not similar, and he wholly ignores the fact that most copies of the *Matsya* say Yajñaśrī reigned twenty-nine years, and that the *Vāyu* and *Brahmāṇḍa* say nineteen years. That line obviously purports to have been written when Yajñaśrī was reigning only nine years. Upon the question how certain numerical

¹ *Path* in the Purāṇas always implies writing, as far as I am aware.

² So also compare Professor Macdonell's statement with Professor Keith's version of it (pp. 742-3).

expressions should be read, his remark (p. 1025, n. 3) is pointless. I never asserted that the numerals are accurate, and Mr. V. Smith regards the statement as inaccurate, rejecting 360 even more emphatically than 163. Again, in his remarks about the *Tuṣāras* (p. 1026) he suppresses the fact that I said the line is corrupt and merely suggested 105 or 107 years as a probable figure.

Professor Keith says (p. 1026), "Mr. Pargiter lays great stress on the fact that it is incredible that the Guptas should not have been mentioned if the *Matsya* account was compiled in their epoch. But here we are without cogent arguments." I pointed out in my book why the argument *ex silentio* regarding the Guptas is incontestable. In his opinion, then, silence in an account that professes to be historical regarding one of the greatest dynasties that reigned in India has no cogency, but silence in the *Rigveda*, where it has no significance, supplies conclusive historical arguments!¹ If the silence is not cogent as regards the Guptas, is it cogent as regards Harṣa? or the Mohammedan invasion? He politely calls my suggestions a wild conjecture (p. 1025), and then offers as sane a conjecture of his own which wholly disregards the cardinal fact that the *Matsya* knows nothing of the

¹ JRAS., 1914, pp. 736, 739, 742. Here his remark, that I completely misunderstand his "statement that the Vedic texts are not books of historic purpose" (p. 1031, note), calls for notice. In the argument about *Triśaṅku* he shifted his ground, started a new argument, and charged me with misunderstanding (pp. 739, 741-2). Similarly here. I quoted his own words to speak for themselves. Now he says that phrase merely means "that they do not deal with history"; but this is not the same thing as that phrase. There was no misunderstanding; he is shifting his ground. This new rendering, however, does not help him, because it does not affect Professor Macdonell's plain statement (pp. 742-3), and because it is obviously absurd to base historical arguments on the silence of texts that "do not deal with history" (p. 742). He adds, "their historic context is incidental." I am not sure what these words mean. If he means that historical facts are mentioned incidentally, I assent, so far as the facts are contemporaneous; but, where those texts speak of bygone matters, obviously they merely draw them from tradition with no guarantee of infallibility.

Guptas. He improves thereon by another conjecture, hardly consistent therewith, that the *Matsya* was redacted later still, in the fifth century (p. 1026).

Six kinds of evidence were adduced to show that the dynastic account of the Kali age was composed in Prakrit originally. He criticizes several of them partially, but it is impossible for me to discuss all the details fully here; hence, while referring to my original statement for the full presentation, I will notice those main points on which his remarks have a general bearing.

Four instances of metrical irregularities in the second pāda of śloka lines were pointed out. They are of two kinds. In the first three, *Nirāmitrāt tu Keemakah, samā bhoṣyanti trīmśatim*, and *aṣṭāvīṁsatīr Haihayāh*, the fifth syllable is long by position though it should be short; and in the fourth, *Bhagavān avatarīṣyati*, there is an excess syllable. He disposes of them all together with the remark, "they [the metrical criteria] do not weigh if we admit, as we must, that the strict rules of metre are not applicable in these cases" (p. 1027). It is quite true that similar metrical irregularities are found elsewhere; but the two kinds are distinct and must be considered separately, and as regards the fourth instance he does not meet my argument.

The first three instances violate the diiambic close of the śloka line. Professor Hopkins points out "that the diiambus was regarded in general as obligatory". Also, referring to the many "cases in which Sanskrit grammar is violated", he says, "the most frequent cause of such violation is the well-nigh obligatory diiambus at the close of a verse"¹; and he gives examples to show that Sanskrit grammar was violated rather than that the rule about the fifth syllable should be disregarded.² Metre therefore was far more imperative than grammar. Here also such

¹ *Great Epic of India*, pp. 244-5.

² *Id.*, pp. 245-7.

violations of metre are but few. Professor Keith's explanation is therefore merely his own assertion; there is no "must" in the matter at all. Moreover, it is no real explanation; it merely shirks explanation, for the questions to be answered are these. Why in these and similar cases do words occur which infringe the well-nigh obligatory rule? And how is it that they infringe the rule in their Sanskrit forms only and that their Prakrit forms would satisfy the rule?

Next come grammatical irregularities. Professor Keith refers to the line in the *Bhāgavata*, *atha Māgadha-rājāno bhavitāro vadāmi te* (p. 1028). This is good Pali. That the verb *vadāmi* governs the preceding words and the line is not Sanskrit is clearly proved by the fact that it was considered necessary to emend *bhavitāro* to *bhāvino ye* in various copies. He speaks of a blunder: it is not mine. For the two other instances that he deals with (p. 1028) and the cases of grammatical discord (p. 1029) it is sufficient to refer to my original remarks; and here I need only notice the general comments with which he disposes of those and other irregularities: "We have to do with accounts composed in the careless Sanskrit which is characteristic of the pre-classical *Sūtra* texts and which persists in the epic" (p. 1028), and "bad Sanskrit is a sufficient explanation of these vagaries" (p. 1029). These are no explanations; they merely shirk explanation, for it is no explanation of an irregularity to say that irregularities occur elsewhere, and that is all that his statements amount to. The question to be faced is this, Why do such irregularities occur in compositions which show that their authors could write good Sanskrit?

Professor Hopkins has suggested patois as the explanation of such and other irregularities, metrical and grammatical¹; and that points in the right direction; but it involves a further question, why should patois appear

¹ *Great Epic of India*, pp. 247, 252, 260-6.

amid good Sanskrit? Patois means vernacular, and vernacular in ancient India means Prakrit. His suggestion therefore means that such irregularities are due to Prakrit; and the question becomes this, why do Prakrit influences appear in Sanskrit compositions? My explanation (confining myself here to this dynastic account) is that the verses were originally popular and in Prakrit, and when they assumed a Sanskrit garb, Prakrit forms sometimes survived, especially when metre had to be safeguarded and Sanskrit forms would have violated it; sometimes the redactor preferred ungrammatical Sanskrit forms rather than violate the metre; and sometimes correct Sanskrit forms were used with oversight of the metre. Can Professor Keith give a better explanation?

The reading *eka-kṣatra* instead of *eka-cchatra* in the Bhāgavata is due to the influence of some copyists, because it is found in two or three only of the many copies consulted; but his attempt to explain thereby the form *Śiśunāka* for *Śiśunāga* in the *Matsya* and *Vāyu* (p. 1029) overlooks the patent fact that *k* instead of *g* is the almost universal reading in those books, so that by parity of reasoning *g* is due to the influence of copyists and not *k*, and his reasoning refutes itself.

As regards his remarks on the use of expletives, it is sufficient to point out that he has carefully chosen the least striking of the lines quoted and ignored the more striking. How does his argument look, in the face of these two lines?—

Svātiś ca bhavitā rājā samās tv aṣṭādaśaiva tu.
śatāni triṇy aśitīm ca Śakā hy aṣṭādaśaiva tu.

His concluding remarks about the script overlook these elementary facts; this dynastic account had been written down, see *ante*; two scripts were in use then, Kharoṣṭhī and Brāhmī; and it must have been written in one or

other of these two. If, then, errors are found which can only be explained by confusion of letters in the Kharoṣṭhi script and not in any other script, what is the natural inference?

The chief feature of the dynastic account is the great quantity of grammatical irregularities, while violations of metre are very few. Those irregularities are far more numerous here than can, I believe, be matched anywhere else within an equal quantity of verses. They have all been discussed in my book, and Professor Keith has dealt with some of them. The question, why they occur, is not to be decided by such comments as he has offered, which are no real explanations. The evidence is cumulative, and the whole has to be considered fairly. He contests my explanation. I invite him to answer these elementary questions. When was the dynastic account (not the Purāṇas generally) compiled? Where did the author get his material for it from? In what shape did that material exist? What did the author do with it when he composed this prophetic account?

F. E. PARGITER.

RAMANUJA AND MELUKOTE

It is well known that the great reformer Rāmānuja lived for several years, owing to persecution by the Chōla king, at Mēlukōṭe, which is Yadugiri, Yādavagiri, or Tiru-Nārāyaṇapuram, near French Rocks, Mysore District, and that he reconstructed and consecrated the temple of Nārāyaṇa there through the aid of his disciple the Hoysala king Viṣṇuvardhana. A very brief but ancient record, under the title of *Jīrṇōddhāra-krama*, has been recently discovered by me; and it contains valuable information about the exact dates of some leading events, and about the actual amounts contributed by Viṣṇuvardhana

towards the several items of reconstruction and consecration of the temple. The record was found by me among the valuable manuscripts belonging to the Śrī-Yatirāja-Maṭha, the abode of Rāmānuja at Mēlukōṭe; and the late Swāmi of the Maṭha was kind enough to lend it to me. Its authenticity seems to me unquestionable, inasmuch as it gives a brief account of the period from A.D. 1099 to 1242, and stops there abruptly, showing that the author must have lived about the middle of the thirteenth century A.D., and that he must have intended the record to be continued by his followers.

I give below a list of events and dates as found in this record; and I hope to publish an exact rendering of the whole record at an early date.

	Cyclic year, date, etc.	A.D.
1. Rāmānuja's discovery of the god Nārāyaṇa at Mēlukōṭe.	Babudhānya, Māgha śu 5, Saturday, (Rēvati).	1099
2. Viṣṇuvardhana pays his respects to the god.	Same year, Māgha śu 13 (Sunday).	„
3. Viṣṇuvardhana's return to Toṇṇūr after sanctioning 5000 <i>gadyāṇas</i> for the re- construction of the temple.	Same year, Māgha ba 7 (Tuesday).	„
4. Construction commenced.	Same year, Phāl- guna śu 13 (Friday), Vṛishabha-lagna, (Hasta-nakshatra).	„
5. Construction finished.	Svabhānu, Vaiśākha ba 5.	1104
6. Śrī-Yatirāja-Maṭha built for Rāmānuja.	Same year.	„
7. Rāmānuja left Mēlukōṭe for Delhi to bring the pro- cessional image Śalvappille or Cheluvārāya-svāmi.	Vyaya, Chaitra śu 3	1107
8. Return to Mēlukōṭe with the image.	Vikṛiti, Āśvayuja śu 7.	1111

- | | Cyclic year,
date, etc. | A.D. |
|---|-----------------------------|------|
| 9. Rāmānuja's return to Śrī-
raṅgam, after consecrating
the temple of Tirupati on
his way. | Śubhakṛit, Pushya
śu 13. | 1123 |

The total period of his stay at Melukōṭe
or of absence from Śrīraṅgam is here
calculated as 23 years, 11 months.

- | | | |
|--|-----------------------------------|-----------------|
| 10. Rāmānuja's successor ap-
pointed by him at the
Yatirāja-Maṭha, Melukōṭe. | Up to Pramāthin,
Chaitra ba 6. | 1123-59 |
| 11. (Next Svāmi) Nārāyaṇa Jiyar. | Up to Prabhava,
Pushya śu 1. | 1159 to
1207 |
| 12. (Next „) Yatirāja Jiyar. | | 1207-42 |
| 13. (Next „) Yadugiri Nārā-
yaṇa Jiyar. | | |

There is nothing very improbable in the above list being correct. I leave it to experts to judge of the accuracy of the dates; but I believe that full credit is, all the same, due to the author who has so carefully preserved the traditional account. Some great calamity, owing to Muhammadan invasions, seems to have occurred at Melukōṭe about the end of the thirteenth or the beginning of the fourteenth century; and the line of succession of the *Gurus* of the Śrī-Yatirāja-Maṭha must have been interrupted for some decades. It must have been resumed in the fifteenth century, when the town was rebuilt (vide *Imperial Gazetteer*, vol. xvii, 1908, p. 290).

M. T. NARASIMHIENGAR.

The value of the record mentioned by Mr. Narasimhiengar can be judged when we have its text and translation before us. Meanwhile, something must be said about some of his notes on it.

When the writer of a paper such as that given above leaves the accuracy of his dates to be considered by

"experts", he certainly makes matters easy for himself. But a more satisfactory course—in fact, the only really correct one—would be that, if he himself cannot do what is necessary, he should enlist the sympathetic help of some properly qualified friend, who will fix all his dates for him before he begins to write, and will lend his own name in support of results to that extent. If that cannot be done, he should find from some standard table—(e.g., Sewell and Dikshit's *Indian Calendar*, table 1)—the year A.D. in which a given cyclic year or a given Śaka year (current or expired, as the case may be) begins; and, for such a period as that with which we are concerned here, he should take that year A.D. as the equivalent for the first ten months of the Hindū year, placing the last two months in the next year A.D.: this is not a scientific course; but it is admissible if nothing better can really be done. It is of no real use to embark on chronological discussions without first having the essential bases definitely settled on some uniform and recognizable lines.

The dates in this case, and Mr. Narasimhiengar's treatment of them, are open to remarks as follows:—

No. 1. This date may possibly have some special calendrical interest. We understand that the record gives the cyclic year Bahudhānya, Māgha śukla 5, Saturday, with the moon in the Rēvati *nakshatra*. The general facts of the case show that this Bahudhānya is the one which coincided with the Chaitrādi Śaka year 1020 expired, and began on 6 March, A.D. 1098. If we follow the system of true intercalation, according to which there was no intercalated month in this year, these details do not work out satisfactorily: Māgha śukla 5 was not a Saturday (and was not in A.D. 1099); it was Thursday, 30 December, A.D. 1098, on which day it ended at about 18 hrs. 29 min. after mean sunrise (for Ujjain); and the moon did not enter Rēvati until about 13 hrs. 15 min. after mean sunrise on the Friday. But by the

system of mean intercalation the month Māgha itself was intercalary in this year. For the first Māgha the result stands as above. But in the second Māgha the given *tithi* was a Saturday, as required: it ended at about 13 hrs. 32 min. after mean sunrise on Saturday, 29 January, A.D. 1099; and on this day the moon was in Rēvati at sunrise and up to about 1 hr. 30 min. after mean sunrise. However, whether this result really justifies a conclusion that the system of mean intercalation prevailed at Mēlukōṭe at the end of the eleventh century, we must hesitate to decide.

Nos. 2, 3, 4. I do not spend any time over these three dates, because, the weekdays being shown in brackets, it is not clear whether they are really given in the record, or whether they have been added by Mr. Narasimhiengar by inference from No. 1: it is enough to say that not from either point of view mentioned under that date does Phālguna śukla 13 work out to a Friday. For the rest, these three dates certainly fell in the opening months of A.D. 1099, though there are reasons for thinking that that is not the understanding on which Mr. Narasimhiengar has referred them to that year.¹

The remaining dates might of course be calculated (except No. 6, in which there are no details beyond the cyclic year): but they cannot be tested like No. 1. They are open, however, to the following remarks:—

No. 10, Pramāthīn, Chaitra bahula 6, certainly fell in A.D. 1159; and No. 11, Prabhava, Pausa śukla 1, certainly fell in A.D. 1207. But the other A.D. dates are wrong: thus:—

No. 5. The given day in the year Svabhānu fell in A.D. 1103; not 1104.

¹ He seems to have taken A.D. 1099 as the general equivalent of Bahudhānya, as a result of which these three dates and also No. 1 would belong to the early part of A.D. 1100: see what he has said about Bahudhānya on p. 153 below, and my comment on p. 154-5.

No. 6. For Svabhānu without any specified day in it the proper equivalent is A.D. 1103, or more strictly 1103-4; not 1104.

No. 7. The given day in the year Vyaya fell in A.D. 1106; not 1107.

No. 8. The given day in the year Vikṛiti fell in A.D. 1110; not 1111.

No. 9. The given day in the year Śubhakṛit fell in A.D. 1122; not 1123.

J. F. F.

THE INITIAL AND CLOSING DATES OF THE REIGN OF THE HOYSALA KING VISHNUVARDHANA

In the volumes of the *Epigraphia Carnatica* and in the Mysore Gazetteer Mr. Rice invariably gives A.D. 1104-41 as the period of the reign of the Hoysala king Vishnuvardhana, also known as Bittidēva and Bittiga; but in his *Mysore and Coorg from the Inscriptions* he says (p. 99):—"In what year his reign began has not been discovered. DB 11 might have decided the question, being of his 12th year, but unfortunately no year is named. The earliest actual date that can be cited for him is 1111 in Sh. 89, but Kd. 164 represents him as ruling in 1100: this must have been in association with Ballāla, his elder brother." Accordingly, he gives A.D. 1111-41 as the dates of Vishnuvardhana in the dynastic list on p. 97 of the same book.

Initial date of the reign

I have just discovered the initial date of Vishnuvardhana's reign from a close study of the Hoysala inscriptions. The inscription Ak. 110, which mentions him as ruling at Dōrasamudra during the reign of the Western Chālukya king Tribhuvanamalla, i.e. Vikramāditya VI, does not give the Śaka year, but gives the year

of the grant as *45neya Dundubhi-samvatsara*. This year Dundubhi corresponds to A.D. 1142; and the expression *45neya* cannot mean anything else than the 45th year of Vishnuvardhana's reign, for it cannot refer to the Chālukyan era that began in A.D. 1076; in that reckoning Dundubhi was the 67th year. So we come to the conclusion that Vishnuvardhana's reign actually began in $1142 - 45 =$ A.D. 1097. This date is confirmed by various traditional and historical records which unanimously state that Rāmānuja, the great Vaishṇava reformer, converted (in A.D. 1098) king Bittiḍēva, who was ruling the Hoysala kingdom, having his residence at Toṇṇūr (Tonḍanūr), and that, with the king's aid, Rāmānuja discovered and consecrated the image of the god Nārāyaṇa at Mēlukōṭe in the year Śaka 1021 (A.D. 1099), corresponding to Bahudhānya.

Vishnuvardhana must have been *Yuvarāja* for some years before A.D. 1097, for we find references to him in the earlier inscriptions also. He must have ruled simultaneously with his elder brother Ballāḷa I for some years, as we may judge from the inscriptions.

Closing date of the reign

Although we cannot exactly find, at present, the closing date of Vishnuvardhana's reign, we can safely assert that he must have reigned for several years after A.D. 1141. Mr. Rice has confounded one Bittiḍēva, a general of king Vishnuvardhana, with Vishnuvardhana himself, being misled by the similarity of names, and infers (p. 101) from Cm. 96 that Vishnuvardhana died in A.D. 1141, but the inscription really records the death of the general Bittiḍēva.

The following inscriptions, all referring themselves to the reign of Vishnuvardhana, clearly prove that he must have ruled up to A.D. 1156, though his son Narasiṃha I

is said in some of the inscriptions to be ruling along with him (as *Yuvarāja*) during this period :—

1.	<i>Epi. Carn.</i> , vol. 5, Ak. 110	of A.D. 1142
2.	" vol. 4, Ng. 94	" 1142
3.	" vol. 6, Kd. 99	" 1143
4.	" vol. 6, Mg. 3	" 1143
5.	" vol. 4, Ng. 100	" 1145
6.	" vol. 6, Kd. 34	" 1148
7.	" vol. 5, Hn. 65	" 1149
8.	" vol. 12, Ck. 40	" 1149
9.	" vol. 12, Ck. 28	" 1156

For an account of the general Bīṭṭidēva above referred to, see *Epigraphia Carnatica*, vol. 5, introd., pp. 16, 17.

A detailed discussion of these points will be found in a paper on the chronology of the Hoysalas which I hope to publish shortly.

M. T. NARASIMHIENGAR.

Mr. Narasimhiengar seems to take his A.D. dates from the headings of the translations in the *Epigraphia Carnatica* volumes. That is not a safe course: the dates must be read in the texts; and then the year A.D. must be fixed by ascertaining whether a given Śaka year is to be taken as current or as expired, and by paying attention to the further details of the month, etc. For instance:—Vol. 4, trans. p. 139, does place his No. 5, Ng. 100, in "1145 A.D." But the text shows (p. 245) that the record is dated on the day of the winter solstice of the Raktākshin *saṃvatsara*, Śaka 1067. A reference to any standard table—(e.g., Sewell and Dikshit's *Indian Calendar*, table 1)—will show that the record means Śaka 1067 *current*. And so the given day places the record in A.D. 1144 (not 1145).

Dates taken from other sources must be treated with equal care. On p. 153 above Mr. Narasimhiengar has said "Śaka 1021 (A.D. 1099), corresponding to Bahudhānya."

A very short inquiry would have shown that this remark could not stand. Śaka 1021 *expired* (as most usually cited) was certainly A.D. 1099 (in the sense that the first ten months of that Śaka year fell in A.D. 1099), but the cyclic year was Pramāthin: Bahudhānya was Śaka 1021 *current*, corresponding, in the sense stated above, to A.D. 1098 (not 1099).

These discrepancies do not affect Mr. Narasimhiengar's present results. But attention is drawn to them to illustrate further the point (compare p. 149 above) that anyone who aims at dealing with chronological matters, and wishes to inspire confidence in his results, must first get all his dates properly settled, so that they will stand being checked by his readers.

A remark may be added about the final date, No. 9. The record, vol. 12, Ck. 28, is dated in the Dhātu *samvatsara*, Śaka 1079. This, again, is a *current* Śaka year: and in this case the equivalent is given rightly as "1156 A.D." at trans. p. 80. The text shows (p. 136) that the record seems to have been dated on the day of the winter solstice. If so, it takes Vishnuvardhana on to quite the end of A.D. 1156.

J. F. F.

MR. MARSHALL'S TAXILA INSCRIPTION

Having now, by the courtesy of Mr. Marshall, been favoured with a copy of the new inscription, I may be allowed to add the following observations, which are partly of an apologetic character:—

1. First, I may venture to express a high appreciation of the great exactness of the reading, which leaves practically nothing to reward the scrutiny of other scholars. The photograph itself is a remarkable technical achievement, being pieced together out of as many as sixteen fragments.

2. The reading *pradistavita*, for which I had proposed *pratithavita*, is in both instances quite certain. The form, being undoubtedly an equivalent of *pratithavita* = *pratiṣṭhāpita*, must be regarded as a characteristic of the local dialect.

3. Inspection seems to confirm the readings *U(rasi)kena* (ll. 1-2), *Imtaphria* (l. 2), proposed by me; in the case of *(ni)rva(nae)* also, for *(m)a(nae)*, the curve in the *a* is favourable (Mr. Marshall, I learn, does not assent).

4. *(Sa)dhiham(na)* and *a . de* (in l. 5) are still obscure. We expect the inscription to end *ayan̄ deya-dharma-paricāga*, which may have been wrongly copied by the (rather careless) workman.

5. In *pracega* (l. 4) the vowel *e* seems to be indicated.

6. The important *ayasa* (in l. 1) appears to stand good. Whether the *viyasa*, which has been proposed by Dr. Fleet (October, 1914, pp. 998-9) and against which I have no prejudice (except, perhaps, on grounds of date and dialect), may possibly be read, I am unable to decide (Mr. Marshall is certain of *ayasa*).

F. W. THOMAS.

LA FONDATION DE GOEJE

1. Le conseil de la fondation n'ayant subi aucun changement depuis le mois de novembre 1913, est composé comme suit : MM. C. Snouck Hurgronje (président), H. T. Karsten, M. Th. Houtsma, T. J. de Boer, et C. van Vollenhoven (secrétaire-trésorier).

2. Vers la fin de l'an dernier, le conseil a pris à la charge de la fondation l'édition critique du *Kitāb al-Fākhir d'al-Mufaḍḍal* par M. C. S. Storey; elle paraîtra avant peu chez l'éditeur Brill à Leiden.

3. Au printemps le conseil a accordé une subvention au docteur G. Bergsträsser, de Leipzig, en vue d'une enquête sur la langue arabe parlée en Syrie et en

Palestine. Un rapport succinct de ce voyage se trouve dans la ZDMG. lxxviii, pp. 600-2, 1914.

4. Le capital de la fondation étant resté le même, le montant nominal est de 21,500 florins (43,000 francs). En outre, au mois de novembre, 1914, les rentes disponibles montaient à plus de 2,600 florins (5,200 francs).

5. On se permet d'attirer l'attention sur ce qu'il est encore disponible un certain nombre d'exemplaires de la reproduction de la *Ḥamāsah d'al-Buhturī*. En 1909, la fondation a fait paraître chez l'éditeur Brill à Leiden cette reproduction photographique du manuscrit de Leiden réputé unique. C'est au profit de la fondation que les exemplaires sont vendus; le prix en est de deuxcents francs. Ainsi les acheteurs contribueront à atteindre le but que se propose la fondation: de favoriser l'étude des langues orientales et de leur littérature.

Novembre, 1914.

NOTICES OF BOOKS

ASSYRIAN AND BABYLONIAN LETTERS BELONGING TO THE KOUYUNJIK COLLECTION OF THE BRITISH MUSEUM. By ROBERT FRANCIS HARPER, Ph.D., Professor of Semitic Languages and Literature at the University of Chicago. Parts XII and XIII. The University of Chicago Press; the Cambridge University Press, London and Edinburgh.

Each volume contains 116 octavo plates, with xviii and xix pages of titles, dedication (to the Rev. C. H. W. Johns and the Rev. A. H. Sayce, D.D.), preface, and indices. The texts in vol. xii number 100, and those in vol. xiii 97. Many of them are mere fragments, and only twenty-five or thirty have, wholly or in part, the names of the writers. Among the most interesting names may be mentioned Sin-tabni-ušur (two documents), Šama'-gumu (probably two likewise), Bêl-ibni, Merodach-baladan, and there are also documents from the Urites and the people of Aššur. The following notes will give an idea of the contents of these interesting communications:—

1216, which bears forty-seven longish lines, is in the Babylonian character, and occupies three plates. It mentions a certain Bêl-ušêzib, a servant of the king, who honoured his master. As he refers to "Esarhaddon, the son of the king my lord", it would seem that this communication was addressed to Sennacherib. He apparently speaks of a plot to kill him and also the king's servants. As he refers to someone (? Esarhaddon) who would (re)build Babylon and complete Ê-sagila (the Temple of Belus there), this letter may belong to the period after Sennacherib's destruction of that city. The text may be a communication from a Babylonian who remained faithful to Sennacherib notwithstanding all his atrocities, but the imperfection of the record leaves this uncertain.

Another important communication is No. 1238, which is from the governors (*hazanāti*), the mayor(?) (*aba*), the heads of the city Aššur, and the Aššurites, small and great. It speaks of governor Ištar-na'id, and apparently of the destruction which he had wrought. After a reference to talents and manas of gold and silver, there is a mutilated and therefore untranslatable passage. It was with the following petition:—

"To the king our lord we say: If he deliver us to the governors, thy servants will die. We have sent 2 letters to the king our lord, but we have not seen an answer. We give our persons to death. Let the king not forsake his servants."























It would be interesting to know upon what occasion this was written.

Another interesting specimen of tablets of this class is 83-1-18, 53, one of the tablets unearthed by Hormuzd Rassam in 1882, Harper's No. 1241—

. . . which in the midst of . . . [Pek]od (?) upon us . . . [to the king] our lord we send, and [let him ?] send a force to help us. And the Gurasimmu tribe is set [against] us. An enemy has gone or has prepared (?) (to go) against them. The authority of Assyria is remote from them. And none among the governors has gone to their aid—they have given (their) hand to the enemy. Eridu and Kullab, which are left, if they can, will stand against the enemy. All the Gurasimmu tribe has now revolted, no city there supports Assyria except Ur and Kisik, and the city of Abu-iddina. And the king our lord knows that Ur in the midst of Akkad is [faithful ?]. To that end we were at first perfect with our help. Pekod and Tamtim hate us, and devising evil against the house of thy gods, by killing and plundering they will put an end to us; everything falling, we shall pass into their hands. Now Tamtim, Pekod, and Gurasimmu have gathered troops against us. [Let] the king our lord send

a force to the help of the house of his gods. Thou hast given the property of the kings thy fathers, to the god Sin. The hands of thine enemy thou shalt take, and the land shall [not] depart from the hands of the king, and Assyria [shall be . . .] before them. The great men of the king [shall go] or shall prepare (to go) to keep the watch. . . .

Though there is neither name of writer nor of any other personage in this inscription to help to determine the date, other texts seem to furnish the needful indications. Thus No. 1206 describes the Gurasim (= Gurasimmu) as being ruled over by a certain Balat-su, and this name implies that they were of Babylonian race. No. 1342, which also refers to them, mentions a certain Bêl-ibnî, whom Aššur-bani-âpli seems to have sent as his representative in Babylonia. To all appearance the period was that of this Assyrian king's expedition against his brother Šawaš-šuw-ukîn (Saosduchinos).

The variant writings of the name Gurasimmu are interesting:     , *Gurasimmu*,    , *Gurasimmu*,     , *Gurasim*. No. 1244 has the combination        , *Ur* and *Gursimmu*, without any prefix or suffix.

All will learn of the author's death with great regret, but the remaining volumes of the series will duly appear, and form a monument to his memory.

T. G. PINCHES.

VORDERASIATISCHE BIBLIOTHEK. Urkunden des alt-babylônischen Zivil- und Prozessrechts, bearbeitet von M. SCHÖRR. 8vo. Leipzig: Hinrichs, 1913.

This, a thick book of 618 pages, is the first part of the eighth section into which the series is divided. The

documents translated number 317, and are preceded by an introduction of lvi pages, treating of the literature of Babylonian law, and the various branches of the same, with bibliographies of the works bearing upon the texts dealt with. At the end of the work we find lists of names of persons, gods, temples, animals, countries, people, places, gates, streets, rivers, and canals. The renderings themselves are supported by lists of Semitic and Sumerian words, and an appendix gives a list of dates of contemporary rulers, in which we find, first in order, the well-known name *Narām-Sin*, who appears as a contemporary of *Sumu-ābu*^m, the founder of *Hammurabi's* dynasty. It is needless to say that this is not regarded as the renowned son of *Sargon of Agade*, who reigned about 2800 B.C.

The documents translated, which belong exclusively to the period of *Hammurabi's* dynasty, are classed in sections under letters, and subsections under Roman numerals, in accordance with the very practical system adopted. Each section has a good description of the texts translated therein, so that the reader easily obtains an idea of their most interesting points. The scope of the work, however, precludes any extended examination of these in the present notice.

The transcriptions and translations are in parallel columns, but space is economized by giving the names of the witnesses in smaller type and in single column without translation. The body of the work is set in the type known as "English" old style of a very satisfactory clearness. In the transliterations the author shows his caution by transcribing the Sumerian phrases found in these texts from time to time syllabically, and not as connected words; their Semitic equivalents, however, are given in notes. There is no cuneiform.

The following specimen-text will show the system adopted:—

195 : Sippar, 30. Nisannum, 16. Ammi-saduga.

Text: M 107 (88-5-12, 57). Trans. KU iii 75.
Contents: W., T., and P. each receive 1 male or female slave as their share of inheritance, after the eldest brother has sworn concerning the amount of the inheritance. In addition W. kindly makes over (?) to his two brothers the property which he had obtained by his own efforts. 4 judges, 5 witnesses, and the archivist.

¹ Irēšu amtum anum-Ba-
Ša gu-du mārē meš-ša ² zitti
warad-³šu marduk dēkām⁴
⁵ Irēšu wardum šilli-ir-
ra ⁶ zitti ib-ni-⁷šu marduk
⁸ Irēšu amtum la-la-bi-tum
⁹ zitti pa-az-za-lum ¹⁰ mi-im-
ma an-ni-i-im ¹¹ zittōtū¹²
mārē meš warad-¹³šu ul-maš-
ši-tum

¹⁴ Ša warad-¹⁵šu marduk
dēkām (?) ¹⁶ a-hu-šu-nu ¹⁷ i-
na e-mu-uk ra-ma-ni-šu
¹⁸ ir-šu-ú-ma ¹⁹ a-na ib-
ni-²⁰šu marduk ²¹ ū pa-az-
za-lum aḥ-ḥi-šu ²² i-na tu-
ba-ti-šu i-zu-zu

²³ iš-tu warad-²⁴šu marduk
dēkām (?) a-hu-šu-nu ²⁵ a-
na mar-ši-it ²⁶ I warad-²⁷šu
ul-maš-ši-tum a-bi-šu-nu
²⁸ i-na ni-iš ilim ²⁹ a-na
ib-ni-³⁰šu marduk ³¹ ū pa-az-
za-lum aḥ-ḥi-šu ³² ū-ub-bi-
bu ³³ ū-ul i-tu-ur-ru-ma
³⁴ I ib-ni-³⁵šu marduk ū pa-
az-za-lum ³⁶ mārū meš
warad-³⁷šu ul-maš-ši-tum

¹ 1 slave-woman Anum-
gamil (?) with her children,
is the share of Warad-
Marduk, the caravan-
leader (?); 1 slave Šilli-Irra
is the share of Ibni-Marduk;
² 1 slave-woman Lalabitum
is the share of Pazzalum. All
this are the shares of Warad-
Ulmaššitum's children.

What Warad-Marduk, the
caravan - leader (?), their
brother, has acquired by his
own exertion, he has shared
to Ibni-Marduk and Pazza-
lum, his brothers, in his
kindness.

As Warad-Marduk, the
caravan - leader (?), their
brother, with regard to the
property of Warad-Ulmaš-
šitum, their father, has
justified himself with his
brothers, Ibni-Marduk and
Pazzalum, by the oath of
God, Ibni - Marduk and
Pazzalum, sons of Warad-
Ulmaššitum, will not proceed

²⁵ *a-na warad-ilu marduk
dēkim (?) a-ḫi-šu-nu* ²⁶ *ū-ul
i-ra-ag-ga-mu.*

against Warad-Marduk, the
caravan - leader (?). their
brother.

²⁷ *niš ilu šamaš ilu marduk
ū am-mi-za-du-ga Lugal-E*

They have sworn by
Šamaš, Marduk, and Ammi-
saduga, the king.

²⁸ *In. Pu(d). Demeš*

Here come the names of the four judges: Nannar-manšum, Sin-išmeani, Ibqu-Annunitum, and Ibqu-ili-šu. Among the other witnesses may be mentioned Mār-ūmi-ēšrê ("the son of the 20th day"), an Amorite, and Tamlatum, son of Ibqu-nâr Idigna ("the river Tigris has carried away," "cleansed," or the like).¹

The impressions of the cylinder-seals (which are not mentioned in the work) give an indication of the parentage of the judges, and from them we learn that Nannar-manšum was a worshipper of the deified king Ammi-ṭitana, whilst Ibku-Annunitum adored the reigning king, Ammisaduga, as did also Warad-Maruduk, the eldest brother, and Mār-ūmi-ēšrê. Other cylinder-impressions are from the seals of Ibni-Maruduk, the second brother; Warad- . . . (probably the name of a witness read by Schorr as Warad-ētil-anna) son of Ib[gatum]—he was devotee of two gods; a certain Taqir- . . . , son of Na'id-ila . . . ; a witness whose cylinder-seal bears no name, but a dedication to a god; Tamlatum, the second witness, whose device was apparently not accompanied by his name; and another, possibly a woman. The document was evidently regarded as an important one.

The names of the witnesses are followed by the date, which Dr. Schorr gives as follows:—

³⁰ *warah nisanim ūm*
³⁰ *kam* ⁴⁰ *mi am-mi-za-du-
ga lugal-e* ⁴¹ *imîn-bi mah
dingir babbar lugal-a-ni-ta*
⁴² *id am-mi-za-du-ga nu-
ḫu-uš ni-ši.*

On the 30th of Nisan-
num,⁴⁰ in the year in which
king Ammisaduga, by the
powerful command of
Šamaš, his lord, the canal
Ammi-saduga-nuḫuš-niši.

¹ These names are read otherwise by the author.

The verb is wanting, but is easily supplied; the year was that named after the digging of the canal in question—a canal whose name conferred upon the king a glory exceeding that of the greatest conqueror ever known: "Ammi-zaduga (-saduqa) is the people's abundance" (cf. Poebel, *The Babylonian Expedition of the University of Pennsylvania*, vol. vi, pt. ii, p. 104).

This specimen of the texts is one of the inscriptions preserved in the British Museum, and was first published by the German Assyriologist Bruno Meissner (M) in 1893, with several others belonging to our national collection and that of the Royal Museums of Berlin. The number of British Museum inscriptions included in the present work is about 124. Improved readings are in many cases given.

T. G. PINCHES.

THE LIFE OF MUHAMMED. By the Rev. Canon SELL, D.D.
The Christian Literature Society for India. pp. xiv
and 232. London, Madras, and Colombo, 1913.

To treat on so intricate a subject as the life of Mohammed and the early history of Islam in so small a compass means to give little more than the bare results of original research into the sources. As the numerous quotations from modern works show, such research seems not to have been the foremost idea in the mind of the author. He was therefore free to produce a popular book which makes no pretensions to add much to our present knowledge on the subject. As far as is possible in a book with a religious tendency, the author has striven to judge men and matters impartially and with discretion. His relying in the main on secondary sources, however, has left little room for historical criticism. He appears to take many of the legends bearing on Mohammed's early

life and prophetship as historical, although their fanciful character has been shown again and again. In the list of works mentioned as his authorities we miss Prince Teano's gigantic *Annals* with their compilation of every detail that counts. The author reproduces the story of the meeting of the young Mohammed with the monk Bahira, and the anecdote connected with his name *al-Amīn*, without offering any criticism. The discussion of the views of modern writers on Mohammed's "fits" is likewise without result. We should rather agree with the Moslim writers who "do not admit this theory of fits" (p. 31). At most they might be reduced to the effects of nervous excitement, caused by suspense, which is quite explicable. The author also upholds the story of the *fatra*, or the supposed interval of several years between the first and subsequent revelations, but no evidence to support it exists. It has even been disproved on reliable grounds. *Hijra* the author still translates by "flight", which is now obsolete, because it does not agree with the real meaning of the word.

In spite of the numerous works extant on the life of Mohammed there still remains an enormous mass of detail to be elucidated. Even the broad historical facts are so mixed up with what is doubtful and entirely fictitious that the work of digging out the kernel of truth is one of great delicacy and which requires an almost unfailing discrimination. The author of our book, with his profound knowledge of the Arabic language and the literature concerned, combined with his undoubted gift as a popular writer, could be of great assistance to students by giving the greater part of his attention to the original sources. The few debatable points mentioned do not in any way detract from the merit of the book.

H. HIRSCHFELD.

EPIGRAPHIA ZEYLANICA, Vol. II, Pts. I, II. By Don
MARTINO DE ZILVA WICKREMASINGHE.

The two first parts of the second volume of Wickremasinghe's interesting publication contain principally pillar inscriptions belonging to the tenth and eleventh centuries. The Kirigallāwa pillar (No. 1), discovered by Mr. H. C. P. Bell in 1892 about 20 miles north-north-east of Anurādhapura, was set up by King Udaya I in the year 953 A.D. Wickremasinghe has found out in this occasion (p. 9) that the kings of the tenth century use the titles Salamevan and Siri Sang-bo alternatively. If one was known as Salamevan his successor was called Siri Sang-bo and vice versa.

Nos. 2-5 are pillar inscriptions of about the same date and the same contents. Their subject is the granting of the usual immunities to villages in the neighbourhood of Anurādhapura. The form of the letters and the style of the language in the Timbirivāva inscription (No. 3) are in agreement with the Moragoda pillar of Kassapa IV (vol. i, No. 17), the first twelve lines in both being almost the same word for word.

No. 6 is a pillar inscription of Kassapa V discovered by Mr. Bell in the ruins of Māḍirigiriya, 46 miles south-east of Anurādhapura. The nature of the privileges agrees in the main with other similar records of the period, but in addition to these the inscription contains rules for the management of the hospital attached to the monastery. The expression used for "hospital" is *ved-hal* = *vaidyaśālā*, and the inmates of the hospital are called *ved-hal-vāssan* (C 10). The other terms mentioned by Wickremasinghe on p. 26, viz. *ved-hal-kāmiyan*, *ved-hal-dasun*, *ved-samdaruwan*, *ved-hal-badgam bīm*, *ved-hal-bad-kudīn*, do not occur in the inscription.

The order that "dead goats and fowls should be given to the hospital" (C 16) would show that animal food was

allowed in these Buddhist institutions, but the translation of this passage is doubtful.

Velā-yut pasdenā (B 24) is translated "the five superintendents of fields" and *velā-yut samdaruvan* (C 12, 13) "agricultural officials". Clough's Dictionary has a word *vela* = land sown with grain, field or farm. It must be identical with Sanskrit *vela*, "garden, park" (Hemacandra, *Abhidhānacintāmaṇi*, 1111). A different word is *vel* = Skt. *velā*, "coast" (Geiger, No. 1390).

No. 7 contains a grant of the usual immunities to a certain plot of ground belonging to Tisaram nunnery. In C 11, 12 we ought to read *kolpāṭṭin* instead of *tolpāṭṭin* and compare this with *kolpatrī* in the Mahākāṭṭaewa inscription (A.I.C., No. 110) A and C. I have translated this passage "in agreement with the Kolpattra community of priests", and stick to this translation until further notice.

The Aetavīragollaeva pillar (No. 9) is the only inscription contained in this volume which has been published before by Dr. Goldschmidt in 1876 and by me in 1883 (A.I.C., No. 117) with an incomplete translation. The contents are the usual immunities granted to the village Velangama, but in the introduction King Dappula V tells us that he ransacked the Pāṇḍya country and obtained a victory in the ninth year of his reign (1000 A.D.).

With regard to the translation I have the following remarks to make: For the term *uḷuvāḍu* (C 3) Wickremasinghe refers us to vol. i, p. 199, n. 12. There we find the translation "basket-makers", which has no etymological foundation. But the same word occurs also in vol. i, p. 112, n. 3, and there we have the correct translation "brick-layers". *Uḷuvāḍu* = Pāli *ūṭṭhikāvaddhaki* (Mahāv. 222). The translation of *dāligattan* by "bird-catchers" seems correct. In *Abhidhānappadipikā*, 514, the Pāli *jālīko* is rendered by *varadālvādda*. *Tuṇḍise* (C 22) is a difficult word. Wickremasinghe refers us again to

vol. i, p. 199, but there also he gives no translation. In Jātaka, v, p. 102, we read—

*Rattimhi corā khādanti, divā khādanti tundiya
ratthasmim khuddarājassa bahu adhammiko jano.*

By night to thieves a prey are we, to publicans by day,
Lewd folks abound within the realm, when evil kings
bear sway.

Most probably our *tundiya* is the same as this *tundiya* in the Jātaka. The meaning "publicans" would suit very well.

Another translation is possible if we lay stress upon the *s* in *tundise*. Burnell in his *Elements of South Indian Palaeography* (London, 1878) on p. 126 mentions the kingdoms of Pandion and of Tundis. The first occurs in *Periplus Maris Eryth.*, § 58, and in Ptolemy, vii, 1, §§ 11, 79; Pliny, vi, 105; the second in *Periplus*, § 54; Ptolemy, vii, 1, § 8. Now the name *Pāṇḍi* is frequent enough in the inscriptions of the tenth century. It generally stands together with *Solī* (the kingdom of the Coḷas in Southern India), as for instance in the Timbiriwāwa inscription (vol. ii, No. 3), B 22. Under the circumstances it would be quite natural to find also the kingdom of *Tundis*. Then the translation would run thus: "The inhabitants of Tundis shall not enter." Cf. also the Rājamāligāwa pillar inscription at Polonnaruwa (vol. ii, No. 10), B 24, 25. I give both renderings of this important expression, but I confess that I prefer the first one.

The second part of vol. ii begins with the Rājamāligāwa and Mayilagastota pillar inscriptions of Mahinda IV. The latter of the two has been published before by Dr. Goldschmidt and by myself (A.I.C., No. 120). Wickremasinghe accepts our statement that Mahinda IV of the Mahāvamsa is identical with the Siri Sang-boy Abahay of the Mihintale tablets and with the Mihindu of the

Mayilagastota inscription, and traces out a genealogical table which enables us to form an idea as to how the Ceylon kings of the tenth, eleventh, and twelfth centuries were related to one another. With regard to the translation, he deviates in several points from the one given by me in 1883. In this respect I have the following remarks to make :—

Line A 26 we ought to read *vāvasthā kārū* and translate in the manner adopted by Wickremasinghe in his note 5. *Vāvasthā* means "regulation" and occurs in the Vessagiri inscription of Mahinda IV (*Epigr. Zeyl.*, vol. i, No. 2), line 30, and in the Paepiliyāna inscription of Parākramabāhu VI (A.I.C., No. 160).¹ Wickremasinghe's rendering of B 3-10 is preferable to mine. With regard to B 13-21, I can neither accept his translation nor do I stick to my own. The passage remains obscure.

No. 13 is a slab inscription of King Kirti Niṣṣaṅka Malla at the Ruvanvāli Dagoba in Anurādhapura, published before by Rhys Davids in JRAS. VII, p. 353 f., and by me in A.I.C., No. 145. In his introductory remarks (p. 74) Wickremasinghe calls attention to a class of fowlers called *Kāmbodī* and mentioned in line 27. He believes that "the *Kāmbōjas* have come to Ceylon as horse-dealers and that a colony of them may have settled permanently in Anurādhapura in company with the Yavanas when that city was in the zenith of its glory". That the *Kāmbōjas* were known principally as horse-dealers in Ancient India is proved by several passages in the *Jātaka*, the *Mahāvastu*, and the Indian lexicographers, to which Mr. G. K. Nariman in his interesting article in this Journal for 1912, pp. 255-7, has called attention. From line 27 of our inscription we learn that in Ceylon they were known as bird-catchers, and that Niṣṣaṅka Malla,

¹ Jolly, *Zeitsch. deutsch. morgenl. Ges.*, xliv, p. 344, translates it by "Rechtsgutachten".

"by bestowing on them gold and cloth and whatever kind of wealth they wished," gave security to birds.

Weber, in his reviews of James d'Alwis' introduction to Kaccāyana's grammar of the Pāli language (*Indische Streifen*, ii, 316 ff.) and of Burnell's *Elements of South Indian Palaeography* (*Indische Streifen*, iii, 348 ff.), has shown that *Kamboja* has quite a different signification in the inscriptions of Aśoka from that which it has in later Pāli lexicography, as for instance Abhidhānapadīpikā, 185, from where Childers takes his quotation. In Vedic literature Kamboja is the name of a nation on the north-west frontier of India, supposed to have dwelt in close proximity to the Yavanas. Later on the name was transferred to Further India in the same way as Campā, the capital of the Angas (the modern Bhagulpore), was later on a city near the mouth of the River Mekong (Barth, *Inscriptions sanscrites du Camboge*, p. 69). The descendants of the first-mentioned Kambojas had adopted the Mussulman creed and used to trade all along the west coast of India from the Persian Gulf down to Ceylon and probably further east, while the Kambojas of Further India were devout Buddhists. I think Wickremasinghe is correct in stating that the Kambojas mentioned in Niṣṣanka Malla's inscription belonged to the former class (p. 76).

The remaining portion of pt. ii contains some more inscriptions of the same king, viz. the slab inscription of the Hāṭa-Dā-ge portico at Pollonaruva (No. 14), the Hāṭa-Dā-ge vestibule wall inscription (No. 15), the Hāṭa-Dā-ge inside wall inscription (No. 16). They offer no particular interest.

Before concluding this review I must make up for an omission which I committed some years ago in reviewing the fifth part of the first volume of the *Epigraphia Zeylanica*. It concerns the expression *pārāhār* in the Kiribat-velera inscription (p. 161) and in the Iripinniyāva

pillar inscription (p. 170). Wickremasinghe is perfectly correct in identifying this with *parihāra*, "immunity." He or I might have added that this word with the same signification occurs several times in Manu, viii, 237-9. See Bühler's translation, SBE, xxv, 248.

E. MÜLLER.

BERNE, November, 1914.

TAMIL STUDIES, OR, ESSAYS ON THE HISTORY OF THE TAMIL PEOPLE, LANGUAGE, RELIGION, AND LITERATURE. By M. SRINIVASA AIYANGAR, M.A. Madras, 1914.

The author, in his preface to this work, states that he has essayed "for the first time to put together the result of past researches, so as to present before the reader a complete bird's-eye view of Tamil culture and civilization". For this purpose he has not only utilized his own wide and scholarly knowledge of Dravidian languages and literature, but has based his facts on the reliable evidence of epigraphic remains and inscriptions. Up to the present time fiction and fable have, to a great extent, sufficed as a groundwork on which to found an account of early Dravidian history and literature. Translations of early texts are often useless as being merely essays in so-called poetry; they seldom give the true meaning of the original, and are generally unreliable for any critical or historical purposes. M. Srinivasa Aiyangar points out that "communication of knowledge in these days is best done in prose, not poetry . . . The prose should be simple and idiomatic, free alike from pedantry and baldness". The author, therefore, while fully recognizing the work of previous scholars, such, for instance, as that of P. Sundaram Pillai in his *Milestones of Tamil Literature*, and that of Dr. Barnett in his *Catalogue of Tamil Books in the British Museum*, with its valuable introduction, may well claim

to have satisfied the crying want for a textbook of accurate information, given in clear and idiomatic English, respecting early Dravidian history and literature.

Essays on Dravidian Ethnology lead up to the fatal division of the people into the right- and left-hand castes which is traced by the author to the time of Rājārāja Chōla, after his conquests in the first quarter of the eleventh century. The division arose after A.D. 1010, when the Chōla monarch "marshalled his extensive armies . . . into two great divisions, the one consisting of those men who had won for him victories in all his foreign campaigns, and the other composed of new soldiers from the Pandya, the Telugu, and Canarese countries, who had formerly fought against him from his enemies' camp. The former, recruited chiefly from the Vedan, Nattaman, Malayaman, and Paraiya castes, he called the right-hand army (*valaṅkai vēlaikkāran*), while the latter, made up of the Pallans, Pallis, Madegas, and Bedars (Canarese hunters), was called the left-hand army". This argument for a military and political origin of the ever-perplexing division of the agricultural and artisan classes is supported by evidence from the inscription of Rajendra Chōla where the "old troops of the right hand" (*valaṅkaippaṇam paḍaigal*) are referred to in contradistinction to the new ones of the left hand; further, from the fact that Ādirajendra Chōla (A.D. 1065) imposed a poll-tax (*S.I. Ins.*, vol. iii, p. 165) on all male members of both factions.

Some suggestive facts are advanced to support the author's view that the Vatteluttu alphabet was introduced from Western Asia by Tamil merchants about the seventh or eighth century B.C., and that, although it was supplanted by the Grantha characters in or about the tenth century, it was not borrowed or adapted from the Brahmi or Asoka alphabet. His account of Dravidian philology ably supplements the work of Caldwell's

Comparative Grammar. The Academy period of literature is held to have extended from 500 B.C. to A.D. 500, and included the eight anthologies, the ten major and eighteen minor poems, as previously set forth by Śeshagiri Śāstri in his *Essay on Tamil Literature*. The Jain, Buddhist, and Brahmanic periods of early literature are extended down to A.D. 950, while from that date down to A.D. 1200 the sacred hymns and poems of Śaivas and Vaiṣṇavas, which had till then remained scattered, were collected and arranged. A detailed and lucid account of this period of literature expands the recent exposition set forth in Farquhar's *Primer of Hinduism*.

A chapter is specially devoted to the Āzhvārs or Vaiṣṇava saints, of whom it is pointed out that "religious fanatics have gathered together a mass of legendary and superstitious accounts often of a conflicting and sometimes of an incredible nature".

The Tiru Vāchakam of Tiru Mānikka Vāchakar is held to have been composed about A.D. 870, while its compilation, together with the earlier Devārām hymns of Appar, Sambandhar, and Sundarar, and other poems, into the eleven Tiru Murai by Nambi Āṇḍar Nambi, is dated about A.D. 1025. To this date also is ascribed the compilation, with the assistance of Śrī Nātha Muni, of the Vaiṣṇava hymns into the Nālāyira Prabandham. It is a relief to find that translations of extracts from early Tamil poems are given in prose and not in poetry. Unfortunately, many of these extracts remain untranslated into English. As the work is eminently suited to be a reliable textbook for English and Indian students, a hope may be expressed that in a future edition these extracts may receive translation.

R. W. FRAZER.

KASHMIR ŚHAIVISM : being a brief introduction to the history, literature, and doctrines of the Advaita Śhaiva philosophy of Kashmir, specifically called the Trika System. By J. C. CHATTERJI, B.A. (Cantab.), Vidyāvāridhi. Fasciculus I. (The Kashmir Series of Texts and Studies, vol. ii.) 8vo. The Research Department, Kashmir State: Srinagar (Bombay printed), 1914.

Mr. Chatterji is fortunate: he has a wide general knowledge, a thorough grasp of Kashmiri Śaiva literature, a happy gift of expression which enables him to convey the peculiar philosophical conceptions of Hindu thinkers in terms intelligible to the Western mind, and lastly the office of Director of the Research Department in the State of Kashmir, which puts at his disposal the best books and the ablest native intellects in that country. The present book shows that he has made good use of all these advantages.

This first volume falls into two parts, part i treating of the history and literature of the subject, part ii of its doctrines. The origins of the Śaivism of Kashmir are rather obscure. Its literature, as it exists in its present form, may be classified, as Mr. Chatterji shows, under three heads—Āgama-śāstra, Spanda-śāstra, and Pratyabhijñā-śāstra. The Āgamic books, which tend towards Tantrism, seem to have preached a dualistic system of theology, which, taken together with the analysis of nature developed in detail in other parts of Śaiva literature, shows a striking parallel to the system of the Śēśvara-Sāṅkhya. To eliminate this dualistic heresy a new school arose, of which the earliest extant product is the Śiva-sūtra ascribed to the god Śiva, which with its commentaries—notably the ancient *vṛtti*, Bhāskara's *vārttika*, and Kṣēma-rāja's *Vimarśini*—teach a thoroughgoing monistic idealism, and endeavour to interpret the older Āgamas in that sense. The Spanda school, based on the Spanda-kārikās ascribed

to Vasu-gupta (flourished early in the ninth century), with the *vr̥tti* of the latter's disciple Kallaṭa and some later commentaries, follows the general principles of the Śiva-sūtra, enunciating its doctrines in dogmatic form. Lastly, the Pratyabhijñā-śāstra,¹ accepting the same idealistic doctrines, and supporting them with logical argument and active polemic, was founded by Sōmānanda (probably a disciple of Vasu-gupta) in his Śiva-dr̥ṣṭi, which was followed by Utpala's Īśvara-pratyabhijñā-sūtra, with the *vr̥tti* of the latter author and Abhinava-gupta's commentaries Vimarśinī and Vivṛti-vimarśinī, etc. These three idealistic schools are often collectively designated by the term Trika.²

One is tempted to speculate on the historical relation between this Trika of Kashmir and the Śaiva-siddhānta of Southern India. The two systems have obviously so much in common that they may well have originated from a common source: In e.g. their classification of the Śaktis and the modes of the phenomenal universe they are practically at one. Their chief difference seems to lie in the conception of the relation between the Absolute Śiva, the individual soul, and the Māyā, the material principle. Here the Trika is throughout a monistic idealism. The Southern Siddhānta is less clear: sometimes it seems to preach dualism, as when it opposes the Absolute Śiva to Māyā and the individual souls, and sometimes again it asserts their fundamental unity, e.g. when it declares that

¹ The Sarva-darśana-saṅgraha applies this term not only to the doctrines here mentioned, but also to the schools based on the Śiva-sūtra and Spanda-kārikās.

² I take this opportunity to acknowledge with gratitude Mr. Chatterji's correction on p. 11 of my mistake in JRAS. 1910, p. 719. But I regret to say that I am still not convinced that Abhinava-gupta's Paramārtha-sāra is based upon the Vaiṣṇava tract of that name, and that the latter is really the ancient Ādhāra-kārikās. The whole is greater than its part: if, as Abhinava-gupta asserts, his P. is an *epitome* of the Ādhāra-kārikās, it must have been shorter than the latter; but it is actually longer than the Vaiṣṇava P.

the worlds are the body of Śiva, souls His senses, the Śaktis His organ of thought (Śiva-ñāna-siddhiyār, iii, v. 7), and expresses their relation as "neither one, nor two, nor neither one nor two"—in fact, a relation which can only be conceived in mystic exaltation above the realm of reason, by the spirit of grace. These and other circumstances lead one to suspect that the basis of the Southern Siddhānta may be found in the older Āgamic teachings of Kashmir, and Mr. Chatterji would greatly increase our already deep obligation to him if he would collect and publish some selections from those works.

L. D. BARNETT.

IRON IN ANCIENT INDIA. By Professor PANCHANAN NEOGI, M.A., F.C.S., Government College, Rajshahi, Bengal. Bulletin No. 12 of the Indian Association for the Advancement of Science. Calcutta, 1914.

The activity of the Indian Association for the Advancement of Science is a welcome feature in the rapidly changing scene of modern life in India. Professor Neogi has chosen a good subject for his contribution, and is, no doubt, well qualified to deal with it from the technical point of view. He has not, however, confined himself to that, and has ventured into discussions of Vedic philology and archæological matters where he is not so much at home.

Many Hindu authors have been engaged recently in trying to prove that their forefathers knew everything rather better than their contemporaries elsewhere. Professor Neogi seeks to show that Ancient India knew more about steel and the forging of iron than other nations, and makes out a good case. It would have been better if the author had deferred publication until he could have made full use of Sir Robert Hadfield's treatise

on "Simhalese Iron and Steel of Ancient Origin" in the Journal of the Iron and Steel Institute, 1912, and had studied more thoroughly the history of the ancient use of metals in Egypt, Babylonia, and other countries. He has merely incorporated Hadfield's analysis of Ceylon iron, and obviously is not deeply read about the archaeological subjects on which he touches.

In his interpretation of Vedic passages Professor Neogi relies much on the commentary of Sāyana. But that author lived in the fourteenth century, and there is little reason to trust his opinions about the exact designations of metals in Vedic times. It is unlikely that the Brahmins should have preserved any real tradition on such a subject, which concerned the technical knowledge of the artisan castes; and in all probability the guesses of Sāyana are of no more value than those of his European successors. The fact that Sāyana assumed *ayas* in various passages of the Rig Veda to mean "iron" does not prove that to be the real meaning. I am not convinced that the Rigvedic *ayas* must necessarily be interpreted as "iron". Although some commentators and the dictionaries give "silver" as a meaning of *hiraṇya*, I doubt if that word can really have meant either "gold" or "silver" at pleasure. Such an ambiguity seems to be intolerable. Perhaps *hiraṇya* may have been an alloy of silver and gold. It is somewhat rash to affirm that "the use of iron was common in India from 2000 B.C."

It may be that in some countries the use of iron preceded that of bronze (p. 3), but it is impossible to believe that people who knew iron would go on using pure copper for ordinary tools. I showed some years ago (*Ind. Ant.*, 1905, 1907) that tools of practically pure copper were once largely used in India. The Gungeria hoard from the Central Provinces comprised 424 hammered copper implements associated with 102 silver plates,

evidently all buried together in a box, and many other specimens of copper tools have been found in various parts of India, especially in old beds of the Ganges near Cawnpore. The use of those objects must have preceded that of iron. Professor Sayce tells me that he believes that the ancients knew some method for hardening copper. It should be remembered, too, that by employing corundum powder the action of tools of comparatively soft metal could be much improved.

To return to the iron and steel. Professor Neogi clearly proves that the ancient Indians knew how to make steel by the direct process from wrought iron, and that they possessed exceptional skill in welding "blooms" of wrought iron into huge masses. The iron pillar of Mihrauli near Delhi is 23 ft. 8 in. long, with a diameter varying from 12.05 to 16.4 inches, and certainly was made in that way. I have now given up my theory that the inscription on that pillar refers to Chandragupta II, Vikramāditya (*circa* A.D. 380-413), and am disposed to agree with M. M. Haraprasad Śāstri that it refers to Chandravarman of Pushkarana, Rājputāna, who lived about half a century earlier (*Early History of India*, 3rd ed., p. 290 n.). The Dhār pillar, originally more than 42 feet long, of uncertain but apparently later date, is still more massive. Those cases prove the skill of the ancient Hindus in perfectly forging extraordinary masses of iron. The beams of the Konārak temple are of very inferior manufacture.

The opportunity may be taken of mentioning the success attained by the old Hindu craftsmen in casting copper on a very large scale by the *cire perdue* process. The colossal Buddha from Sultānganj, now in the Museum and Art Gallery, Birmingham, stands 7½ feet high and dates from about A.D. 400 (*History of Fine Art in India and Ceylon*, fig. 118). The Chinese pilgrim tells us that at Nālandā in South Bihār there was a still more remarkable work,

a copper image of Buddha, 80 feet in height, which required a six-story pavilion to accommodate it, and was erected about A.D. 600 by Pūrṇavarman, Rājā of Magadha (Beal, *Life of Hiuen Tsiang*, p. 119; *Buddhist Records of the Western World*, ii, 174).

These facts suggest that Professor Neogi might do well to expand his treatise and produce a thoroughly worked out *History of Metallurgy in Ancient India*. His essay, as it stands, gives an impression of rather hasty production. It is not permissible to assume that the so-called "Somnāth gates" stored in the Fort at Agra may be "authentic" (p. 32). They are purely Muhammedan work, and bear an Arabic inscription in the Kufic character relating to the family of Sabuktigin, for whom prayers are offered by the writer (*Ann. Rep. Arch. Surv. India, 1903-4*, p. 17; Horowitz, *Epigraphia Indo-Moslemica*, No. 3, p. 38, Calcutta, 1912). A truthful label is now affixed to the gates, but errors die hard, and people, no doubt, will insist for a long time yet in believing them to be "authentic".

It may be noted that Professor Neogi, in opposition to Professor Benoy Kumār Sarkār, believes the *Sukranīti* to be "a compilation evidently of the sixteenth century".

V. A. S.

NOTES OF THE QUARTER

(October-December, 1914)

I. GENERAL MEETINGS OF THE ROYAL ASIATIC SOCIETY

October 13, 1914.—The Right Hon. Sir Mortimer Durand, Director, in the Chair.

Thirty-two nominations were approved for election at the next general meeting.

Dr. D. B. Spooner read a paper on "Mr. Tata's Excavations at Pataliputra".

A discussion followed, in which Mr. Vincent Smith, Professor Macdonell, Dr. Thomas, Colonel Waddell, and Dr. Hagopian took part.

November 10, 1914.—Mr. F. E. Pargiter in the Chair.

The following were elected members of the Society :—

Lady Boyle.

Miss M. Lowes Dickinson.

Mr. S. M. Ameen.

Mr. Jagan Nath Bhandari.

Dewan Bahadur Govindass Chathoorbhoojadass.

Babu Devakumar Ray Chaudhuri.

Mr. Sailendranath Comar.

Mr. Duncan Dunbar Dickson.

Sheikh Abdur Rahmi Baksh Ellabi.

Moulvi Syed Abul Fatah.

Rai Bahadur Mati Lal Ganguli.

Mr. Suprakash Ganguli.

The Rev. Jnanaratna Kavidhwaja Gunalankar.

Mr. Sigmar Hillelson.

Mr. K. S. Sankara Rama Iyer.

Dr. Ganganatha Jha.

Mr. A. S. Kent.

Mr. Ghulam Hyder Khan.
 Shafaul Mulk Hakum Abdur Rashid Khan.
 Mr. Mg. Ba Ko.
 Mr. Surendra Nath Kumar.
 Babu Bimala Charan Law.
 Mr. Anant Ram Madan.
 The Rev. E. Oshorn Martin.
 Babu Surendranath Mitra.
 Mr. Morgan Philips Price.
 Moulvi Hafiz Abdur Razzak.
 Mr. H. L. Shuttleworth.
 Dr. H. Suhrawardy.
 Mr. Vatasseri Sri Velayudhan Tampi.
 Moulvi Syed Abdul Wahid.
 Major P. L. E. Warming.

Four nominations were approved for election at the next general meeting.

Mr. Herbert Baynes read a paper entitled "The Oriental Origin of the Conception of Law".

A discussion followed, in which Dr. Pinches and the Chairman took part.

December 8, 1914.—The Right Hon. Sir Mortimer Durand, Director, in the Chair.

The following were elected members of the Society:—

M^{me} Marielle.
 Rev. A. W. Davies.
 Mr. M. P. Hajee Abdul Azeez Maricar.
 Mr. H. E. C. Campbell Wintle.

Two nominations were approved for election at the next general meeting.

Professor L. de la Vallée Poussin read a paper entitled "Ma définition de la grande Véhicule".

A discussion followed, in which Mr. Mead, Dr. Thomas, Dr. Denison Ross, Professor Barnett, M. Petrucci, and Mrs. Bode took part.

II. PRINCIPAL CONTENTS OF ORIENTAL JOURNALS

I. JOURNAL ASIATIQUE. Série XI, Tome III, No. ii.

Pelliot (P.). Les documents chinois trouvés par la mission Kozlov à Khara-Khoto.

Weill (R.). Monuments et histoire de la période comprise entre la fin de la xii^e dynastie et la restauration thébaine.

Contenau (G.). La cour et la maisonnée d'un patési d'Umma au temps du roi Dungi.

Roeske (M.). Les inscriptions bouddhiques du mont Koulen.

II. RIVISTA DEGLI STUDI ORIENTALI. Vol. VI, Fasc. iii.

Rescher (O.). La Mo'allauqa de Antara, avec la commentaire d'Ibn el-Anbari.

Ferrario (B.). L'accento in somalo.

Boson (G.). Alcuni nomi di pietre nelle iscrizioni assiro-babilonesi.

Nazari (O.). Rgyeda, libro i, inno 6.

Puini (C.). Di una singolare incarnazione di Samanta bhadra Bodhisattva.

III. THE MUSEUM JOURNAL (UNIVERSITY OF PENNSYLVANIA).
Vol. V, No. ii.

The Alexander Scott Collection of Art Objects from Tibet and Nepal.

IV. JOURNAL OF THE STRAITS BRANCH OF THE ROYAL
ASIATIC SOCIETY, No. LXVI.

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V. JOURNAL OF THE NORTH CHINA BRANCH OF THE
ROYAL ASIATIC SOCIETY. Vol. XLV. 1914.

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VI. INDIAN ANTIQUARY. Vol. XLIII, Pt. dclvii.

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Rangachari (V.). History of the Naik Kingdom of Madura.

Vishweshwar Nath Shastri. Hathal Plates of (Paramara) Dharavarsha, Samvat, 1237.

Enthoven (R. E.). Folklore of the Konkan.

VII. PROCEEDINGS OF THE SOCIETY OF BIBLICAL ARCHEOLOGY. Vol. XXXVI, Pt. vi.

Sayce (A. H.). Geographical Notes on the Hittite Hieroglyphic Inscriptions.

Gwynn (Rev. R. M.). An Omen Text dealing with Houses.

Wash (W. L.). Notes on some Egyptian Antiquities.

Langdon (S.). An account of the Pre-Semitic Version of the Fall of Man.

VIII. TÖYÖ-GAKUHO. Vol. IV, No. iii.

Shiratori (B. K.). Comparative Study of Korean and Ural-Altaic Languages.

Gotō (B. A.). Study on the Chinese Ancient Studies carved on Tortoise-shell.

Hashimoto (B. M.). Study of the Ancient Chinese Classic Shu-ching.

IX. T'OUNG PAO. Vol. XV, No. iii.

Cordier (H.). Les Correspondants de Bertin.

Mathieu (G.). Le système musical.

Lafèrre-Pontalis (P.). Wen tan.

Aurousseau (L.). A propos de l'article de Sylvain Lévi—
Le Tokharien "B" langue de Koutcha.

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JOURNAL

OF THE

ROYAL ASIATIC SOCIETY

1915

IX

THE DATE OF KANISHKA

By SIR J. H. MARSHALL, C.I.E.

II

SINCE publishing my remarks on the date of Kanishka in this Journal, 1914, pp. 973-86, I have succeeded, by the employment of another chemical process, in cleaning still more effectively the silver scroll bearing the Taxila record of the year 136, and I am now able to present a photographic reproduction of nearly the whole of the inscription (Fig. 1).¹ Some fragments, it will be observed, are missing in this reproduction from the upper and lower edges of the scroll. These fragments were too small and friable to be treated further or to be photographed. Another fault of the illustration is the unevenness of the light and shadow on the surface of the metal. This is due to the curved or twisted condition of the several sections and is unavoidable. In order to obtain this illustration, some of the sections of the scroll had to be photographed from three or four different points of view, and the negatives—to the number of nineteen in all—were then composed together into a single

¹ As the half-tone block is bound to lose some of the clearness of the original photograph, I am sending two prints of the original to the Secretary of the Royal Asiatic Society, which anyone interested in the record may consult.

plate. Even so, however, it was not practicable to photograph clearly the lettering at the edges of some of the sections, where the latter were bent sharply inwards, and it is for this reason that I have made another hand copy of the record (Fig. 2), so as to show the form of those *akṣaras* which are not discernible in the Plate.

Notwithstanding that the writing is now much clearer than it was when I made my former transcription, I find that the emendations to be made are very few and of minor consequence.

1. 1. For *Dhurasakena* read *Urasakena*, as Dr. Thomas correctly surmised.

1. 2. For *Dhitaphriaputrana* read *Lotaphria*¹. The *akṣara lo* was much bent, but the reading is made practically certain by the first *akṣara* of the fifth line.

1. 3. For *Tanuæ* read *Tanuvæ*.

11. 4-5. For *sadhihona* read *salohi(da)na* = "blood relations". The *da* is omitted, but the correctness of the reading is established by another inscription from the Chir Tope, which reads—

... e puyæ atmanasa ñati-mitra-salohidana aroga-
dachinae hodreana ...

In one other particular also the translation given by me on p. 976 requires alteration. I there took the word *dhamaraiæ* to be an epithet of Tachasila, but it is now evident from another record, also found at the Chir *stūpa*, that the ancient name of this monument, like that of other *stūpas* in India and Burma,¹ was "Dharmarājikā". The record referred to was inscribed on a stone lamp of Gandharan manufacture and reads—

1. 1. *Tachaiæ agadhamarai[e]* ... *dhra* ... *o* ...
... *sa* ... *o eusa* ... *putrasa*

1. 2. *danamukhe*.

¹ e.g., the *Dhamekh stūpa* at Sarnāth and the *Dharmarājikā* Pagoda at Pagan.

Taxila inscription of the year 136

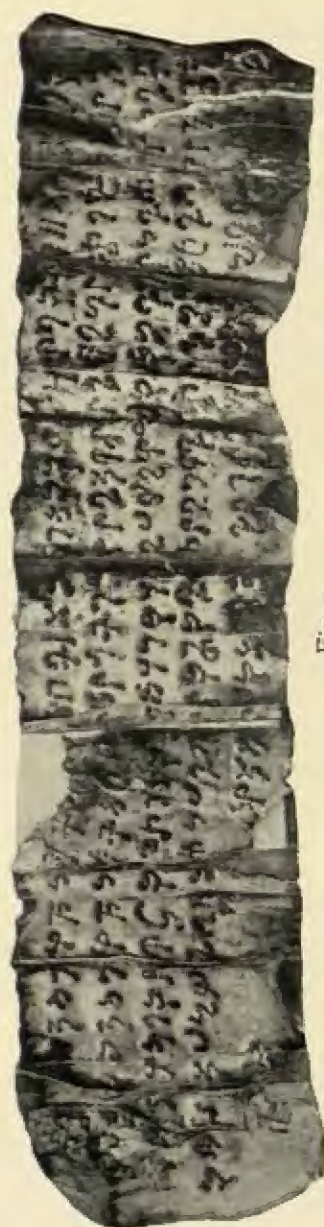


Fig. 1.

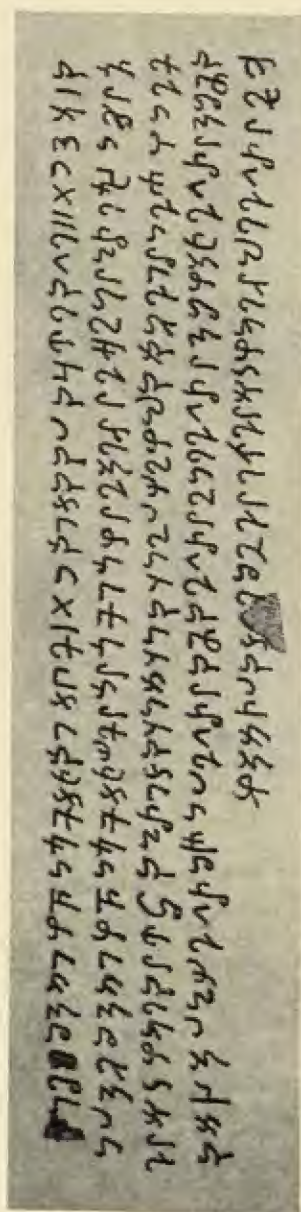


Fig. 2.

As to the reading *Ayasa*, there is no room for doubt. Although in the photograph, owing to the curvature of the metal, the three *aksaras* which compose the word are not quite as distinct as could be wished, in the original *they are as clear as any letters in the record*, the first *aksara* being १, not २ nor ३ nor ४, nor any other letter which ingenuity can suggest. It may, of course, be urged that the scribe wrote what he never intended to write, but of the word, as it stands, there is at least no doubt, and at present there seems no sufficient reason for supposing that it is anything but the genitive case of the proper name "Aya".

In commenting on my interpretation of this record Dr. Fleet has urged against it two objections.¹ The first is that it involves the overlapping of the two eras of Maues and Azes. This objection is one which necessarily had not escaped my own notice, but it appeared to me that the employment of the two eras in these two records was as reasonable as the simultaneous employment, of which Dr. Fleet is himself well aware, of two eras by the Parthians, namely the era of Seleucus (312 B.C.) and the era of Arsakes (248 B.C.). Of the relationship of Azes to Maues we know little or nothing beyond the fact that the former succeeded the latter as ruler over part of his eastern dominions. It is a plausible view, adopted by the most eminent authorities on this period of Indian history,² that Azes I of Taxila was identical with Azes, the colleague of Spalirisa, brother of Vonones, in Arachosia, and that after his transfer from Arachosia to Taxila he founded a new dynasty at the latter place. If this view is correct, there is reason to suppose that Azes was more closely connected with the Parthian Vonones than with the

¹ JRAS, 1914, pp. 992-9.

² Cf. Vincent Smith, *Catalogue of Coins in the Indian Museum, Calcutta*, p. 36, and Rapson, *Ancient India*, p. 144.

Śaka Maues, and it explains at once why a new era was instituted by Azes. In any case, however, it is obvious that in the present state of our knowledge of these two kings there is no justification whatever for assuming that the era of Maues was officially adopted by Azes or his successors. On the other hand, it is easy to understand that the Śaka family of Liaka-Kusulaka may have had close ties with the earlier king Maues, which prompted them to perpetuate his era in their private records.¹ It is also a reasonable supposition, which it would be easy to defend by reference to analogous cases, that the era of Azes did not come into use until some years after his accession—possibly not until some years after his death, in which case, of course, there is no need to assume that the eras of these two kings did actually overlap.

The second objection put forward by Dr. Fleet, as well as by Dr. Thomas,² is that, if *Ayasa* is the genitive of the proper name *Aya*, the opening words of the new record mean "In the year 136 of some unspecified era and in the reign of Aya", who thus becomes identified with the Kushan king referred to in line 3. Dr. Fleet does not, I imagine, maintain that the use of the genitive, in the sense in which I have interpreted it, is grammatically incorrect, but he holds that it is contrary to common usage, and in support of this contention he cites as examples four inscriptions belonging respectively to the reigns of Huvishka, Vāsudeva, Rudravarman, and Kumāragupta. These inscriptions open in the usual way with the titles and name of the ruler, expressed in the genitive case, followed by the date, and it is, of course, well known that in their case, as in that of many other records

¹ Vincent Smith, *Early History of India*, 2nd ed., p. 216, speaks of Azes as a nephew of Vonones. R. B. Whitehead, *Catalogue of the Coins in the Punjab Museum, Lahore*, p. 52, presumes that Azes was a relative of Vonones.

² JRAS, 1914, pp. 987-92.

phrased in a similar way, the era in which they are dated is unspecified. In the two Taxila records, on the contrary, the opening formula presents a significant difference. Here, the year of the era in which they are dated comes first, then the name of the king, and, lastly, the month and the day. If, then, any deduction is to be drawn from the phrasing of the inscriptions cited by Dr. Fleet, it is assuredly that their meaning is not the same as that of the two Taxila records, and that the writers of the latter had a special purpose in not putting the name of the sovereign first, namely the purpose of indicating the name of the king in whose era these records were dated. For my own part, however, I am not disposed to attach unduly great importance to any arguments based on the Brahmi records of Mathura or other remote places of Hindustan, the culture and arts of which at this time differed widely from those of Taxila, and where writers may have employed different modes of expression, just as they employed a different script, in their documents. If Dr. Fleet can point to a single Kharoshthi inscription of this age phrased in the same way as the Taxila inscriptions and dated in an unspecified era, his argument will be materially strengthened.

Turning to the more important question of Kanishka's date, I confess to having read with some surprise Dr. Fleet's remarks on what I wrote anent the Chir *stūpa* finds. On p. 992 Dr. Fleet says that my argument based on discoveries at this site depends on views about art, with regard to which there is a great divergence of opinion among authorities. The evidence, however, to which I drew attention is not based on views about art at all, but on the stratification of buildings, which admits of no dispute. If my meaning was not clear before, let me try to make it so now. The buildings at the Chir *stūpa* occur in four strata, one above the other; in each stratum a different type of masonry is used in their construction,

and with each stratum are associated coins of the kings or dynasties indicated in the following table:—

Stratum.	Masonry Construction.	Coins.
1. Uppermost.	Semi-ashlar, semi-diaper.	Vāsudeva and later Kushan.
2. Second.	Large diaper.	Kanishka, Huvishka, and ? Vāsudeva.
3. Third.	Small diaper.	Kadphises I and II.
4. Fourth.	Rubble and <i>kanjur</i> .	Śaka and Pahlava.

In the city of Sir Kap also precisely the same stratification is found so far as the third, fourth, and earlier strata are concerned, but the city was deserted before any buildings of the 2nd and 1st classes came to be erected, and consequently there are no coins here of Kanishka, Huvishka, or Vāsudeva, but thousands, on the other hand, of those of Kadphises I and II, of the Śaka and Pahlava kings and of the Greeks. Dr. Fleet calls my argument based on this evidence from Sir Kap an *argumentum ex silentio*, and quotes the case of Vasishka as a warning against accepting the absence of coins as evidence. The analogy between the two cases is not apparent. In the case of Vasishka we do not know that he struck any coins at all. In the case of Kanishka, Huvishka, and Vāsudeva, multitudes of their coins are found on the sites at Taxila where buildings of the later type occur, and if, as Dr. Fleet maintains, these rulers preceded the two Kadphises and the Pahlava kings, it is incredible that none of their coins should be found in a city which was in continuous occupation, not only during the period which Dr. Fleet assigns to their reigns, but for several decades afterwards.

My excavations at Taxila have now been resumed, and fresh evidence on this question is accumulating every day. There seems nothing to be gained, however, by dwelling further upon it. Further inscriptions are sure to come to light ere long, and it can only be hoped that one of them will put the date of Kanishka and his successors beyond all possibility of dispute.

X

THE DEITY OF THE CRESCENT VENUS IN ANCIENT WESTERN ASIA

By JOSEPH OFFORD

A CUNEIFORM tablet in the British Museum referring to the celebrated deity of the Babylonians, Merodach (who is identified with the planet Jupiter), states that he possessed four attendant dogs, and gives their names. It is possible that these represent the four largest of the planet's moons, because instances have been known of these having been discerned with the naked eye.

If some of the early inhabitants of Mesopotamia could detect the satellites of Jupiter, it may be considered as certain that the crescent phases of Venus were also familiar to them.¹ The proof from cuneiform literature that they were so is decisive; for instance, Herr Ernst Weidner, reviewing Dr. Carl Bezold's *Astronomie Himmelschau und Astrallehre bei den Babyloniern*, quotes an omen text of Assurbanipal's era as follows:—

"If on the right horn of Venus a star is visible you will have good crops in the land.

When upon the right horn of Venus a star is not visible the land will bear many misfortunes."

Another tablet reads: "If Ishtar takes away upon her right horn a star, and if Ishtar is large but the star small, the King of Elam will be strong and mighty."

For the Babylonians to derive omens connected with the planet's horns makes it certain that they were familiar with its crescent phases. This leads up to some

¹ Dr. Heinrich Gretschel, *Lexikon der Astronomie*, says the crescent form of the illuminated part shows up beautifully at the time of greatest brilliance, and in the clear atmosphere of Persia and Peru it is said to be seen with the naked eye.

² *Orientalistische Literaturzeitung*, 1912, columns 318, 319: "Enuma Ishtar ina Ārni imitti sa Kakkabu la innamir nuhsu mati (ibashshi)."

important explanations of ancient Semitic mythology and astronomy.

Assyrian and Babylonian texts frequently tell us that Ishtar, or Venus, was daughter of Sin, the Moon-god. The probable reason for this paternity is now apparent; it was because her father, like herself, appeared in crescent form, and so both were horned divinities.¹

The ancient Arabians, or Mineans, appear to have connected Venus more closely with the Moon, by making it a male deity; but they called Venus Athtar (Ishtar), apparently to secure the favours of both sexual versions of the deity, as worshipped by them, and also their Semitic kinsmen in Assyria, by giving the star deity the sex of one form and the feminine name of the other.

Though the male Venus, with his feminine name of Athtar, was the form under which the southern Arabs worshipped the planet, their brothers in the north, especially in the case of their later descendants the Safaites, adored the star as Allat, a female deity. That this was their name for Venus, Herodotus explains when he says (i, 131) that the Arabs venerated Aphrodite-Ourania under the name of Alitta; and again (iii, 8) he says her name was Alilat. Some scholars, such as Wellhausen, have confused Allat-Venus with the Arab female solar goddess, because the Arabs sometimes, when speaking of the sun as a supreme deity, called her al-Ilahat, "the goddess." Herodotus does not refer to al-Ilahat, but to Alilat, later shortened to Allat. The Sabeans, cognisant of Venus = Athtar, being a male deity among their kinsmen, sometimes united the two titles of the planet, and speak of Allat-Athtar, **אלת עתתר**. Allat is mentioned in Palmyrene inscriptions, but almost always called Athene. Thus Zenobia's son Wahballat ("gift of Allat") is called

¹ See S. Langdon, "The Lament of the Daughter of Sin": *Zeitschrift für Assyriologie*, xxii, 203. The light of both is reflected, and this may have been detected.

Athenodoros. A relief from Emesa, now at Brussels, shows Athene as Allat. Her robe, nimbus, and sceptre connect her with Astarte and Atargatis, and so we find Allat, as *paredra* of Melek-bel, sometimes called Astarte and sometimes Atargatis, the last probably derived from Athtar'ate, עתתר עת.

It is to the duplication of Venus as morning and evening star that much confusion as to the real name of the goddess is due. She was, in fact, reasonably entitled to two names, hence may be correctly called Aphrodite-Astarte and Atargatis, from Ishtar-'Athtar and Até.¹ The southern Arabs had the same duplication of their male morning and evening stars, in the names Azizu and Arsu of very early texts, later Aziza and Monimus. The Classics knew Aziza was the morning star because a text in *Corpus Ins. Lat.*, iii, i, p. 173, reads "Deo Azizo bono puero conservatori", i.e. Phosphorus.

M. René Dussaud has pointed out that Aziz, or Azizu, is an epithet for a deity who was עתתר שרקך, "Athtar Orientalis"; so שרקך = الشرق is the rising sun, "Oriens," and עתתר שרקך was morning star. Julian at Edessa worshipped Azizo and Monimus. A text from Palmyra calls Arsu and Azizu the "benign gods" (see name Aziza in Ezra x, 27, and Arza² in 1 Kings xvi, 9, and the name Azizus of an Arab chief who fought for Philippus in his revolt against Antiochus). The North Arabian Allat, as morning and evening stars, had by Mahomet's time

¹ A Greek inscription from Delos, published by M. Clermont Ganneau, *C. R. Académie des Inscriptions*, 1909, 308, shows that the author, who lauds his deities because of an escape from pirates, identifies the Syrian Astarte with Aphrodite-Oourania—

Διὶ Οὐρίῳι καὶ Ἀστάρτῃ Παλαιστίνῃ, Ἀφροδίτῃ Οὐρανίᾳ, θεοῖς ἐνηχοῖς.
"To Zeus Ourios, to Astarte Palestina, to Aphrodite Urania, divinities attentive."

The dedicator was an Ascalonite from the Palestine coast, and Astarte=Aphrodite-Oourania was goddess of that town. See also A. Boissier, "Hathor et Ninharsag"; in *Orientalistische Literaturzeitung*, xi, columns 234-6, 551.

² See Arsamus, one of the seventy translators according to Aristæas.

become the two Uzza, distinguished sometimes by the Arabs as Ruda or Raada, and Manat. Ruda, the Safaite Redu, was identical with Arsu.¹

The Akkadian Babylonians seem themselves to have been uncertain as to the sex of Ishtar (Venus), for a text when speaking of her under the name of Dilbat or Delephat, states that the planet was female at sunset and male at sunrise, and so androgynous.² The same text tells us that at sunrise the star was Ishtar of Akkad, whilst at sunset she was Ishtar of Erech.

As to the hermaphrodite sexuality of Ishtar, we have the Moabite Stone speaking of Ishtar-Kemosh, thus uniting the sexes.³ It is curious, too, that a Phœnician inscription of Tyre unites the horned Baal and Astarte into a kind of hermaphrodite, binary deity, for the text reads "Baalition, son of Abdhor, priest of Melek-Astarte".⁴

Melek-Astarte may, however, be parallel with the

¹ See H. Derenbourg, *Le Culte de la Déesse al-Uzza en Arabie au IV^e Siècle de notre ère.*

² See *Cuneiform Inscriptions of Western Asia*, iii, 53, 30-1:

"Kakkabu sinniṣat Dilbat ina ereb šamši [ezuz].

"Kakkabu zikarat Dilbat ina igit šamši izgaz."

The statement Jastrow points out, is that the *star* is male and female. The scribe uses the form *zikarat*, "she is male," not *zikaru*, "is male." (Cf. Sayce in the *Trans. Soc. Bibl. Arch.*, iii, pp. 106-7, 1872.)

³ The "Tanit pene Baal" of Phœnicia is perhaps connected with the same concept, so the Chinese call the evening Venus, Tai-po; it was male and husband of Nu Chien, the morning star.

⁴ See *Comptes Rendus, Académie des Inscriptions*, 1902, 468. It is interesting that Virgil, *Æneid*, ii, 632, uses the masculine for Venus, "Ducente Deo." Servius, commenting on this, says some say the goddess was double-sexed, quoting Calvus, who wrote at the commencement of our era, saying "pollentemque deum Venerum". Morris Jastrow, *Revue Archéologique*, xvii, 283, adds a comment of Macrobius on Virgil. "Of Venus there is a bearded statue at Cyprus, whose body and garb are those of a woman with sceptre and male character (*natura*), and they believe that she is both masculine and feminine." Aristophanes calls her Aphroditos. The Phœnician duplexity of the Astarte goddess had been introduced to the knowledge of the ancients by way of Cyprus. Catullus calls the Cyprian Venus of Amathus "Duplex Amathusia". His meaning is clearly set forth by Paon in his work on Amathus, i.e. that she was depicted as male: αἰς ἀνδρα τὴν θεὸν ἰσχυματῶσθαι ἐν κύπρῳ λέγει. Jastrow, *ibid.*, with some of whose conclusions I do not agree.

priestess of Carthage, whose inscription was given in 1907 by Clermont Ganneau. The text calls her "Rab Cohanim" for Mater Sacrorum. Putting a priestess in the masculine is like the Egyptians, who had priestly colleges with female heads or directors; and Queen Hatasu in her coronation texts takes male titles, as king, and is shown on the relief pictures beside them with a beard.

Venus was the stellar symbol of the great Babylonian, Phœnician, and Syrian goddess Ishtar-Ashtoreth-Astarte, and their intimate connexion is confirmed by Dr. Th. G. Pinches finding Ishtar written Ashtara in cuneiform inscriptions of 2000 B.C. Further, that Ashtoreth-Astarte was nothing else than the Aramean, Phœnician, and Syrian form of the name Ishtar, is further proved by the discovery of an inscription at Memphis to the Syrian Astarte, wherein the goddess' name is written Ashtare. This text doubtless belonged to the Memphis temple of Astarte mentioned by Herodotus, and referred to in an Egyptian inscription in Lepsius' *Denkmäler*, i, 16.

One of the commonest attributes of Ashtoreth-Astarte was a horned head-dress, and indeed she was named, as we find in the Old Testament and in Phœnician and Carthaginian inscriptions, Ashteroth Karnaim, "the double-horned." The site called Ashteroth Karnaim of Genesis xiv, 5 was probably a double-peaked mountain with a temple in the hollow between the horns, like the Baal Karnaim temple near Carthage discovered by M. Toutain. Also the "Karnaim of Atargatis" of 2 Maccabees xii, 26 was a Karnaim, *'Astarteion*, or *'Apreuision*, in some similar geographical position in Palestine.

Because of the horned attributes of Ashtoreth-Astarte, and led astray by the misstatements of classic authors, such as Lucian and Herodian, many writers have called her a lunar deity; but this is an error, for she was certainly considered by the Greeks as identical with

Venus. At the shrine of Afça she was worshipped as a star. The Assyrian Ishtar was undoubtedly not a lunar goddess, but the morning star, for the name given her of Dilbat,¹ the "Announcer", clearly points to the morning star.

Another proof of Ishtar being the Chaldean Venus is in the account of the "Attack of the seven evil spirits upon the Moon", wherein when the moon was temporarily worsted, that is to say eclipsed, Ishtar set up a glittering throne beside Anu, the sky-god, because the moon's light having vanished Venus no longer had a stellar rival in brilliancy.

Moreover, Ishtar, as attendant upon the Sun-god, went to Hades to seek her lord as Tammuz, being the nearest solar planet. Dr. Pinches, in the *Proceedings of the Society of Biblical Archaeology* for 1909, p. 23, proves this from the cuneiform texts giving titles of Ishtar some of these, especially Simua from Simu, which is rendered in Dr. Reissner's *Sumerisch-Babylonische Hymnen* by *qarnā*, "horned," and other names such as Timua, meaning probably "ribbed", or "curved".² Also Subisua, "bowed," or "bent", i.e. the form assumed by a bow drawn for discharge. Yet that she was a horned deity is certain, because Père Scheil has published a Babylonian cylinder depicting her as a cow.

This fact of the cow-goddess is closely connected with the two-horned altars, or shrines, found by Mr. Evans in Crete, which he calls "horns of consecration"; and with the form of the votive offerings at Astarte-temples on Phœnician sites, such as the Balearic Islands, which have images in the form of cow heads with long horns. So the Greeks, when making Astarte a wanderer, represent her as Europa riding upon a bull. The latter animal

¹ Dr. C. J. Ball says Tai-po, the evening Venus of China, is identical with Dilbat.

² See the word *karni* for "horn" at p. 197, n. 2, of this article.

is undoubtedly the same creature as that which, in the Babylonian legend, Anu, the most common putative father of Ishtar, created and gave to her in the Gilgamesh story.

Finally, the Moon-god Sin was masculine; whilst the connexion between the cults of Ishtar-Astarte-Aphrodite, as a voluptuous female deity, is well known. It is probable that the divergent concepts associated with Astarte-Aphrodite of gentleness, or femininity and heat, are connected with Venus as a morning star; goddess of dew, of moisture and fertility, and of the augmenting warmth of the sun's rays; she, as his attendant star, appearing when the rays of the setting sun have shot their last shafts of heat.

The cumulative evidence that the goddess was Venus the star, yet a crescent-symboled deity, and not the moon, is decisive. Her crescent symbol, therefore, can only be accounted for as having arisen from the crescent form of the planet having been observed, and so properly associated with the deity. So much, indeed, did the crescent symbol coincide with that of the lunar deities, that when the real origin of the connexion was forgotten it caused the confusion as to the true astronomical attribution of Astarte-Ishtar,¹ that has been alluded to in two of the late classic writers who have called her a lunar goddess.

In the clear air of Mesopotamia doubtless it was possible to detect the phases of Venus; and so Ishtar-Venus, the later Ashtoreth-Karnaim, is, like so many other primitive concepts, a reasonable expression of astronomical symbolism, the horned emblem upon the figure of the deity indicating the star associated with her name.

¹ For identity of Aphrodite-Astarte, and so of Ishtar, see Philo of Byblos; *τὴν Ἀστάρτην φερέσκει τὴν Ἀφροδίτην εἶναι λέγουσι*. An inscription found at Tyro in 1911 confirms both this identity and the stellar connexion of Astarte, for it gives the title to the *πατέρα* of Heracles, of Astronoe, the Phœnician goddess whose name appears in Damascius (*Vita Isid.*, ap. Photius, *Bibliotheca*, 242, ed. Bekker). The inscription is *Θεῶν Ἑρακλίου καὶ Ἀστρονόης*.



XI

YASNA XXXII, 1-8, IN ITS INDIAN EQUIVALENT

By PROFESSOR LAWRENCE MILLS

1. asyaca** (asmākam ṛtupateh(-s)) svaituḥ(-ur) yāsat((-d)),¹ abhi-(-y-)-ā yacchāt, kila, (-ā-) asurāt prārthayān ime ye (sya) asya vṛjane nivasanti(-āntai)) smad aryam(a)nā; (b) -asya²(?), (haye) devāh, (kila, haye yūyam, deva-pūjakāh (-ā)); madiye,³ mama, māne, manasi (-y evam) asurasya maitryam⁴ (abhi-vṛtam, abhi vriyate, hṛdayabhakti maitryam) sumedhasah(-o) (mahādhaḥ(-s));—

(c) tava (asura, tvadiyāh⁵ (-ā)) dātāsaḥ(-o'sa-) asāma; tān (dūre-) dhārayaḥ(-o) ye vaḥ(-o) dviṣanti(-āntai).

2. Ebhyaḥ, (-o'sy-) asya pūjakebhyaḥ, (-s) sumedhāḥ;

¹ Recall the quite frequent occurrence of *yā* in the sense of "approaching with request or prayers".

² Read for Avesta *ahyā* some form of interjection corresponding to *he, hays*; see strophe 3, with the voc. *d(a)ēvā*. We are well-nigh forced to take *d(a)ēvā* as voc. in order to avoid attributing the "*hvaṣtaḥ, airyāmnā*, and *verezānem*" to the "enemy", as these terms are so closely associated with the Holy Cause. Otherwise *asya devapūjakāh* (-ā-) *yāsan(-ān)*; see strophe 1, XXXI, where the heretic is spoken of as having perverted *vratas*. The flow of the language would be decisive. "Let his *hvaṣta* (prince of the blood) pray"; his V. and his A.; his "are the Devas"; so in S.B.E. xxxi, but on the whole I now prefer as above; see the voc. in strophe 3.

³ Could we form a ***maami(n)* after *tasmān*, etc., to meet Av. *mahmi(n)*, where nasalization is, as elsewhere (see the Inscriptions), left unexpressed?

⁴ *urvdzma* = a ***vrājmā* (?). *urvdz-* is doubtless closely related to *urvdz*, which might encourage us to form a *vrājman* (-mā); see *ureatha* = *vrata*. One writer has compared *brahman*.

⁵ Might we write ***trasyāh* (or *trūyāh* (?)), recalling *trābhāh(-s)* again?

(-dhā mahādhāh) (-ā) asuraḥ((-o)*rūjavat(-ech-)) śraya-mānaḥ, kila, kṣayan, rūjan,¹ vasunā manasā,

(c) kṣatrāt(-e) sacā (kṣatreṇa sahā) prati(-y) *abravat (-it(-d)) r̥tēna sva-suṣakḥinā(?)² svarvatā; śvāntāp vah (vo'ra-) aramatiṃ vasviṃ varāmabe³ (vr̥nimahe (-a iti)); sā naḥ (no 'sat) asat ((-d) asmadiyā*) (**abruvat).

3. āt(-d) yūyaṃ, devāḥ (deva-pūjakāḥ*(-ā) viśve (stha (-ā-)) aghāt(-d) manasaḥ (-s) satrā*)**citram (iti ?), (bijaṃ);—

(b) yaḥ(-ś) ca vah (vo) mah* (*mo(?), bhūyiṣṭhaṃ) yajate; (iti(-y) athā vā, yaḥ (yo-) martyaḥ(-o)⁴ vah(-o) yajate) druhaḥ(-ś) ca ((-ā-) asti sevakaḥ, kila tasyāḥ(-ā) (duṣ-)-pakṣi)** parimateḥ(-ś) ca, ((-e-) iti(?), kila dhṛṣṇa-manasaḥ (-o'sti) asti (asat(-c)));—

(c) cyautnam abhi, (kila (-au-) oḥmani(-y) agrayāyini santi, (-y)*udārpyante yuṣmākaṃ jaya(-o-)-uttarāṇi pragrahaṇāni, yuṣmākaṃ dambhīni⁵ (dambha-cyautnāni, drohiṇaḥ (-a) upāyāḥ(-ā) agrayāyinaḥ(-s) santi), yaḥ(-r) aśrāvyadhvaṃ⁶ (*jagat-prakāśāḥ (-ā) abhavadhvaṃ) bhūmyāṃ saptadhātān(-vām).

4. yat((-d) yūyaṃ tāni pra-mimitha,⁷ niḥ(-r)-mamidhve vā) yena, yebhiḥ, (-r) martyāḥ (-ā) aghatamāni dadhataḥ, (kṛvantaḥ (-o))

¹ Pahl. *sarādrāh*. Has Av. *saremnō* anything to do with Indian *śraḥ*? The Pahl. *sar* may be Semitic.

² Notice this interesting personification of *usha*, while yet used as an adverb. Is this the sole similar occurrence?

³ For *varamaide* see *varati* (aor.?).

⁴ Av. *maś*; see Pahl. *kabed*. Or, with some, *yaḥ* {-yo} *martyaḥ*, but see *maz(i)yo* in Y. XXXI, 17, if that may have any effect. See *mazya* in 4.

⁵ *Dambhiti*: would resemble *daibitānā* more closely, but it is personal.

⁶ A closer imitation would be **aśrudhram* [sic], but the middle of this aor. seldom or never occurs in the Ind. . . ., (c) "advanced, in active progress, your stratagems are . . ." (**parimati* is formed).

⁷ Av. *frē-mimitha*; see *mimitha*, 3rd sg., to *mith-* (Wh.); or is it *mamatha*, *methidhve*, to *math-*, so figuratively(?), "ye have agitated"; see *methire*; recall also *mumire* to *mā-* (Wh.), "ye have managed that . . . For ye have guilefully devised, (with agitation managed), that whereby men, doing the worst deeds . . ."

(b) *vakṣyanti* (-e(?))¹ *deva-justāh*(-ā), *vasoh*(-ś) *śiṣyā-mānāh*² (**śidhyāmānāh*, (-ś) *śiṣṭāh* (-ā)) *manasaḥ*(-s),

(c) *suinedhasaḥ*(-o'su-) *asurasya kratoh*(-r) *naśyantah*, (-a) *ṛtāt*(-c) *cā*.³

(b) . . . will speak as (or, "were called"(?)) loved of the Demon-gods, (beloved of their worshippers), forsaken by the Good Mind(-ed One (so, as a person, wherever possible)),

(c) (far) astray from the understanding of Ahura Mazda, the Life-Spirit-Lord, and (far astray) from Asha, (Archangel of His Law).

5. *tena* (-ā-) *adabhnuta*, *dabhnavaṭha**, *martyam sujivitasya* (-ā-) *amṛtatvasyaca*.⁴

(b) *yat* (-d) *vaḥ* (vo'gh-) *aghena*⁵ *manasā yān* (ye) *devān*⁶ (-vāḥ) (-ā) *deva-pūjakāḥ* (-ā) *asan*, (-n) *aghaḥ*(-ś) *ca manyuḥ*(-r) (*adabnot*(-d(?))); (*iti*, *kila*, *yat*(-d) *vaḥ* (vo'gh-) *aghaḥ*(-ś) *ca manyuḥ*(-r) *ātmā*, (-ā-) *adabhnot*⁷ (*prācinot*(-d) *vā*), *yusmān ye deva-pūjakāḥ* (-ā) *asan* (-n)).

¹ So to *vac* for Av. *vakhṣyēntē*(?). -Is it *vakṣiyanti* = "will grow in strength", to *ukṣ-*? Hardly. One is not so fond of a future here either to *vac-* or to *ukṣ-*, but not only do three MSS. report a fut., but others show a -y without a following vowel, reminding us of the Pahlavi usage of leaving an inherent vowel unexpressed. Reading *vakhṣēntē*, we should see an aorist without augment, which might have the force of a conj.-future. Wh. reports no sigmatic aor. to *vac*. Perhaps we might form one on the model of *varakṣat*(-d) to *ukṣ-*. The Pahl., Pers., and Skt. hint toward *vac-* = "to speak"; "are called" seems not to be so effective a rendering; see "proclamation", "renown", "propagation" throughout; mere prevalent "hearsay and opinion" are not so naturally indicated in this cramped Gāthic diction, with its strong pragmatic bias.

² For *śiṣṭyāmānāh* recall also a *śiṣṭh* = "repel", extended (?), as so often, with -d (whether, however, with a -d, -dh before it, seems to me to be doubtful); two (sonant) dentals in Indian would be somewhat accordant with Av. -zhd.

³ Notice the other ablatives after verbs meaning "estranged", "lost", etc.

⁴ "Therefore ye would beguile mankind of happiness and long life."

⁵ No etym. connexion with *ukṣ*.

⁶ Idiomatic.

⁷ . . . Since the Evil Spirit has ordered or beguiled you . . . It is necessary to supply a form to correspond with either *dehu(a)otā* of line a or *frucinas*(-t) of line c.

(c) aghena cyautnaṃ (prati) yena vacasā pracinot ((-navat) svapakṣiṇaḥ, pakṣavataḥ (-a) iva), yena (samena* vacasā, (-ā-) ājñayā, sva-kṣetā) prācinot(-navat*), punaḥ prodasāhayat (-protsāhayāt(-d), vyaracayat(-d), viracayāt(-d)) dhvarantaṃ* (nāstikaṃ pāpaṃ tasya) ksayan, (-t-), (sva-kṣetā).¹

[(Altern. for c . . . , yena (teṣāṃ kṣetā sva-pakṣibhyaḥ) prācinot (pracinavat, pra-racayāt) kṣayaṃ, kṣitim.)]

6. puru(-rv-)-enāḥ(-ā) inakṣata (?), (enakṣata (?),² sva-kāmārthān(-t-)samaipsata, tān ātmīyān**, janyān(-ś-)ca), yaib(-ś-)*³ śrāvyate (-yāte, prakāśaḥ(-o) bhavāte), -yadi taiḥ(-r anyataḥ), (-o'tha) athā,

(b) (haye tvam) *santi-smāraṇa, (-ā-) arthāni-satyena(-ar-)-rju-santi-smāraṇa⁴ (-ā-) anyataḥ(-o'su-) asura ((-e-) imāni), vasiṣṭhena vettha (prati-jajñātha(-ītha)), manasā (tena)

¹ Shall we take *kṣhayō* as nom. sg. masc. with no exact Indian correspondent in that precise sense and form? Sometimes *-ō* is the transmitted form of the present participle nom. sg. masc.; recalling *-yae-* for *-yā-* = *-yanta-*. The Pahl., Pers., and Skt. hint toward *kṣhi-* = "to rule"; recall *kṣhayū-cā* in Y. XXVIII, 7, which I formerly took as a voc.; so now another, I now, however, preferring a 2nd sg. impv. act. in that place. I render *b* "since even the Evil Spirit also (as ruler (*kṣhayō*), has (deceived) you" (or altern. "has rallied you" (*fracinas(t)*)). If we take *kṣhayō* as an acc. sg. neut.—so some, with no exact Ind. equivalent in *-yāḥ(-s)* neut. (it is hardly a gen. infin.)—we should then have "who assigns 'destruction' to his d(a)eva-worshipping adherent", the subject of the verb being again *Akand Mainyū*. Otherwise we have "by which word their ruler (*kṣhayō* (to *-ya-*, or to *-yāt-*)) rallies his evil servant, the chief *dregvant*".

² Av. *ēnākḥā* = "He has striven to attain his ends". Whether to *naś* = "to destroy", **anināṣiyata* (?) = "He endeavours to destroy".

³ *Yuib* = *yāiś* in a later Ind. may well = "as", but see the related *tāiś* here; better avoid such renderings in the Gātha. It freely equals "whereby".

⁴ Av. *hātā* . . . *marānē* is voc. sg. to a *marāni*. *Santi* [sic] as acc. pl. neut.; see *hāta-marcañ*, probably cited from this place in Yt. i, 8, as a name of God; see Gāthas, Comm. p. 475 (1892-4). Perhaps the idea of "reciting them from memory" through His prophets, should be made more pointed; "O Thou ever remembering the recited ritual and lore, as already revealed." *Vōistā* must mean "recognized".

(c) tvadiye (tava) vi-²,¹ sumedhah, kṣatre, (tava tvadiye (-a)) r̥te ca (vidathe punye (-a) imāns tava) śāsān(-ś), śāsanāni, vi-dhām ;²—(kila-tava dharmāṇi mūlikāni sadā (-ā-)) *akṣiyamāṇāni tvadiye (-ti-) atipunye kṣatre, tava rājya-dhāmasu ((-v) antar vi-dhām, utthāpayāni).*

(a) Full of crime (your leader) has striven to attain his ends* (destroying ours), whereby he is famed, (and his doctrine is declared); but if this be so of these, then (on the other hand),

(b) O Ahura, thou knowest (hast recognized our) essential truths (as) holding them (to be revealed) within Thy memory;

(c) and in Thine Authority, and in the Holy Order of Thy Law, I will establish these doctrines (in Thy name).³

7. ešām enasām (enasvatām)⁴ nakim⁵ vidvān (asti(-y)) (abhi(-y-)anuvaktave yathā (so, reading aojōi), yathā

¹ *vaḥ* ²(?) (-a). I preferred *vē* = *vaḥ* in the Gāthas, so others, as = *pro* *volis*, but it seems to be redundant.

² The Pahl., Pers., and Skt. writers see *vid* here; see Gāthas; notice the long *i* (to *vid*-(?)); others have seen *vidh*-(?); but recall *ā-dān* at Y. XLIX, 10, etc. Notice the state of origination; the "cause" was steadily, but slowly, gaining ground. See Gāthas, Comm. p. 414, and S.B.E. xxxi, at the place.

³ Note the constant struggle to found and maintain the grand, though simple, doctrinal system.

⁴ Another . . . "of the crimes"; better the personal as more objective. Among these wretched beings (their leader) knows nothing, i.e. knows not at all . . .

⁵ Altern. Some might prefer; "Not (even) *n(a)jōi* (?), a clever person —(but see the antithetical *v(a)jōdišō*)—is able to say (*aojōi*, to *vae*, *vaktave*) how many living he cuts with his bright steel . . .," etc.; but see *yāiṣ vriti* and *v(a)jōdišō* as arguing a relation to being "heard" and "declared", as against being "cut"; see also *yāiṣ vriti* in the previous strophe. "Being *heard of* as renowned" is quite a Gāthic idea. I do not think that the force of the following expression *yāiṣ vriti* is confined to "as is said"; all these forms of *vru* = *śru* = "to hear" have a closer meaning in the Gāthas; see Y. XXVIII, 7; XXIX, 8; XXX, 3; XXXII, 6; XLIX, 6. In most places the subordinate sense "as one hears" is impossible, and a waste of sounds in the sparse Gāthic diction.

(-ā-) āhantave vā (so, reading ājōi),¹ sadhryañci (sadhrici-nāni)² santi (-y, asan(-s-)tāni, kila, . . . yathā (-ā-) āhantave niyuktāni, nirūpitāni, tāni(-y) asan)

(b) yāni *jayāni³(-i-)iva śānsate (śāsyante, śāsyāntai) yaiḥ(-ś) śrāvi svarvatā (-ā-) ayasā,

(c) yešām tvam, āsura riktaṃ,* (kila kṣitiṃ, kṣayaṃ) sumedhaḥ(-dho), vediṣṭhaḥ(-tho'si) asi.

8. ešām enasām (enasvatām)⁴ vīvasvān, (**vaivasvataḥ (-ś-) ⁵) śrāvi⁶ yamaḥ(-ś) cid,

(b) yah(-o) martyān(-ś-) cukṣṇūšan ((-noṣ-)?)⁷ (*saṃtutoṣayišan,⁸ (-nt-) saṃtoṣtum (-ṭave) icchan(-n-), ušan, (-n iti(-y)) asmākān martyān, goḥ(-or)⁹ bhagān adan ((-n-) āsit, kila, asmākam go-māḥ(-ā-)¹⁰ ādat(-d));

¹ *ājōi*—so the Pahl., Pers., and Skt. hint—to Av. *jan* = *han*; see, for form only, *jā*(**je*) to ind. *jan* = "to be born". Another to *āh* = "to move", "bring forth" (crime); rather far-fetched.

² Perhaps it would be better to take *hadrōyā* more personally, as referring to the "men" (-cāḥ) of the enemy; but then we should have to read *yōi* for *yā* in *b*. Another to *śāhra* with the sense "desirous"—"going straight to the goal."

³ Av. *jōyā* = *jayā* = "inclining to victory", or, if the sense "living" be preferred, then we should emend the *jōyā* to *jīd*: the *ō* rather points to its kindred *e*; *e* and *o* in the orig. Av.-Pahl. alphabet are represented by the same stroke: *𐬵* = *y* is constantly miswritten for *𐬶* = *e* in MSS.; vowels became disarranged in the early Avesta-Pahlavi, most of the short vowels being inherent in the consonants, while in the Ind. we have only (?) short *a* inherent. (*b*) "... that those things which are heard of as victory-bringing are compacted for smiting . . . of whose destruction Thou art most cognizant."

⁴ So, preferring, as ever, the objective personality to the abstract. Some others take (a) *enavāhām* here again in the abstract as = "sin", "guilty of these sins"; but see the previous strophe where "wretches" seem to be more in keeping; see *p(a)ouru-(a)ṇā* in strophe 6.

⁵ Of these wretches Y. was fated to be . . .

⁶ *vīvasvant* = "descendant of Vīvasvant", the same word with changed accent. Or *vīvasvata* of Yama and Manu, possibly consider also a ***Vaivasvateyah(-a)*; recall *paīṇṇasayah*.

⁷ Again, I prefer "was heard of", in the sense of "famed" . . . to "was said to be".

⁸ Should we write *cukṣṇūšan*?; but see *cucyāṣa*-, *fujuṣia*-, *dudāṣa*-.

⁹ For a desid. from a caus. see the cited forms in Wh.

¹⁰ Notice the sacredness of the cow, far off from India, and at the remote Gāthie date.

(c) eṣām(-ñ-)-cid ā (antar ebhyaḥ, (-o'p-) apa(-ai) ebhyaḥ(-o) vibhaktāḥ (-o'smi)) asmi, ((-y) asmiṁ (-n) arthe vā), tvadīyāyām, iava, sumedhaḥ(-o), viciti-buddhyām api (?).

(a) Of these wretched beings* even Yima Vivaṅghusha was famed* to be;

(b) he who, desiring to content our men, was eating kine's flesh* in its pieces;

(c) from (such as) these in every way, O Ahura Mazda, in Thy discerning discrimination, am I (to be seen as distinct).

For similar treatment see Roth's *Festgruss*, 1893; ZDMG. 1911, 1912, 1914; *Muséon*, 1912, 1914, etc.

(The subject must be exhaustively examined, as the Jewish-Christian doctrinal system cannot be approached without it, the Jews having been Persian for two centuries.)

XII

THE ANCIENT INDIAN WATER-CLOCK

By J. F. FLEET, I.C.S. (RETD.), PH.D., C.I.E.

THE Indian water-clock was an arrangement for measuring by means of water and a jar or bowl the duration of a *nāḍī*, *nāḍikā*, *nālikā*, or *ghaṭī*, *ghaṭikā*, the period of twenty-four minutes, one-sixtieth of a mean civil day of exactly twenty-four hours from mean sunrise to mean sunrise, 6.0 a.m.¹ It has existed in two forms.

In one form use was made of a bowl, with a hole in the bottom of it, which was placed, empty, floating on water in a larger receptacle, and which drew in water and sank in the time stated above. As described by the astronomer Lalla early in the seventh century, this was a vessel shaped like the lower half of a water-pot (*kalāśa*), made of ten *palas* in weight of copper, with a diameter of half a cubit (9 inches) at the top and a height of half of that, and having a hole made with a wire fashioned from

¹ I use the term water-clock with some hesitation, because it seems to give the idea of a dial with hands moved by wheels and cords or chains worked by water, whereas there was nothing of that kind in the Indian appliance: but it is difficult to find any other suitable term. The Greek term *clepsydra* is perhaps intrinsically nearer the mark, since it seems to mean literally "something from which water slips away in a thievish or elusive manner", and to have denoted originally an appliance from which water trickled out: but it, too, in the later developments connotes a machine worked by water; also, when translated, it is rendered by "water-clock"; and so it is not really any better than the plain English term.

A general Indian term for the appliance was *jala-yantra*, 'the water-instrument', with any synonym of it: thus, Varāhamihira mentions it incidentally as *ambu-yantra* in his *Bṛhat-Saṃhitā*, 2, 3; and similarly the *Sūrya-Siddhānta*, chapter 13, speaks of it as *tōṣa-yantra* in verse 21, but in verse 23 calls it *kapālaka*, 'the cup or bowl'. Other names of it were *ghaṭī* and *ghaṭikā*, 'the water-jar', and *ghaṭī-yantra*. It seems to be known now as *kaṭorā*, *kaṭorī*, 'the cup, bowl, or dish'.

3½ *māshakas* of gold drawn out to a length of 4 *āṅgulas* (3 inches). In this variety, but in other sizes and materials, the appliance has survived to the present day, and seems to be fairly well known to people who have lived in Northern India, where it appears to be still used sometimes by police guards in out-of-the-way villages. But I do not trace any paper devoted specially to it, or any account of it which gives what is really wanted.¹ I hope to bring together in another paper all the most instructive passages that I can find in the Indian books, dating from about A.D. 550, relating to this later form of the appliance and to some other methods, mentioned in those passages, for achieving the same end.

My object in this paper is to bring out the point that the more ancient form of the Indian water-clock was a more simple arrangement, and one which worked in the opposite way, namely, by emptying itself in the course of a *nāḍikā*.² As may be seen hereafter, some of the passages of the later period mention this form also, along with the other. But it is not necessary to quote them here. It is enough to use works which themselves belong to the earlier period.

The earliest statements about the Indian water-clock are found in the *Jyōtisha-Vēdāṅga* and the *Kauṭīliya-Arthaśāstra*, both of which works, I believe, may be dated

¹ A notice, with details of size, etc., of a smaller copper bowl of this class from Ceylon has been given by Mr. Reginald Smith in an interesting paper, published in 1907 in the *Proceedings of the Society of Antiquaries of London*, 2nd series, vol. 21, pp. 319-33, which is directed to showing that the British Druids had some appliance of the same kind from at least the first century B.C. Beyond that, I can only find a short reference to an Indian bowl by Glichrist, in a paper on "Hindustanee Horology", in *As. Res.*, vol. 5 (1798), p. 87.

² As far as I can find, this has been recognized only by S. Drivedi (see p. 215 below) and R. Shamasastry (see p. 219). I must correct a mistake which I made in *JRAS*, 1914, p. 174: in line 14 cancel "floating", and in line 16 for "into" read "out of".

from about B.C. 300, though the Jyōtisha is based on some earlier astronomical writing which was perhaps very appreciably more ancient. For the full explanation of the statements in the Jyōtisha we are indebted primarily to the late Shankar Balkrishna Dikshī.¹ He was followed by the late Sudhakara Dvivedi² and by Barhaspatya (Lala Chhote Lal).³ The last-mentioned brought out some points in the details (not quite those given by me) in the way of comparison with our British measures, which did not occur to the others. But only Dvivedi recognized the exact nature of the appliance: namely, that it measured the *nāḍikā* by emptying instead of filling itself. The statements in the Jyōtisha are as follows:—

Jyōtisha-Vēdāṅga, R̥ig recension, verse 17 :⁴—

Nāḍikē dvē muhūrtas=tu pañchāśat-palam=
āḍhakam ।

āḍhakāt=kumbhakō drōṇaḥ kuṭapair=vardhatē
tribhiḥ ॥

“Two *nāḍikās* are a *muhūrta*: an *āḍhaka* consists of fifty *palas*: from the *āḍhaka* there should be filled a water-jar to the extent of a *drōṇa*;⁵ it is too much by three *kuṭapas*.”

¹ See his *Bhāratiya-Jyōtiḥśāstra* or “History of Indian Astronomy,” Poona, 1896, p. 78.

² See his *Jyāntiśāham*, Benares, 1908, pp. 10, 39: this book embodies the substance of lectures delivered in previous years.

³ See his *Jyōtisha-Vēdāṅga*, Allahabad, 1907, p. 11.

⁴ The text is the current one, which may be found in any printed copy, with only the obviously proper corrections of *pañchāśat-palam* = *āḍhakam* for *palamāśhakam*, and *āḍhakāt* for *māśhakāt*. About the third *pāda* see the next note.

⁵ Perhaps we might emend *kumbhakō* into *kumbhake*, and so have:—
“... from the *āḍhaka* there should be measured out a *drōṇa* in a water-jar.” But it seems desirable to take the standing text with as little alteration as is unavoidable.

Varāhamihira used the expression *pañchāśat-palam* = *āḍhakam* in his *Bṛīhat-Saṃhitā*, 23. 2. The chapter deals with the prognostics for the rainfall, which were to be based on the quantity falling under the

Jyōtisha-Vēdāṅga, Yajur recension, verse 24 :¹—

Palāni pañchāśad=apām dhṛitāni

tad=ādhakam drōṇam=ataḥ pramēyam |

tribhir=viḥīnam kuḍavaḥ=tu kāryam

tan=nādikāyās=tu bhavēt=pramāṇam ||

"That *in which* fifty palas of water are held *is* an ādhaka : from this a drōṇa should be measured out ; but it should be made less by three kuḍavas : that is to be the measure of a nādikā."

With these statements of the Jyōtisha-Vēdāṅga we may compare another passage in the same work, verse 7 of the Rig recension and verse 8 of the Yajur, which alludes to the water-clock though it does not give any details of it :²—

Gharma-vṛddhir=apām prasthaḥ kshapā-hṛasa udag-gatau |

dakshipētau viparyāsaḥ śhaṇ-muhūrty=ayanēna tu ||

"During the *time when the sun is going to the north*, the increase of warmth [i.e. sunshine, daylight] and decrease of night *is* a prastha of water *each day* : during the *time when the sun is going to*

successive *nakshatras* coming just after the full-moon of Jyāishtha ; and he tells us that the fall was to be caught in a basin a cubit in diameter, and was to be measured out by "the ādhaka of fifty palas", and states in *drōṇas* the quantity which should normally fall under each *nakshatra*. In commenting on that, Bhaṭṭōtpala has quoted from some unspecified source : — pañchāśat-palam = ādhakam chaturbhir = ādhakair = drōṇaḥ. Dikshit conjectured (loc. cit., p. 215 above) that Bhaṭṭōtpala quoted the second and third *pādas* of this verse of the Jyōtisha-Vēdāṅga, and so has given what must be taken as the real original text of the third *pāda*. That is quite possible : but it involves a rather violent correction of the current text ; and it does not follow of necessity, because Bhaṭṭōtpala may have quoted from some metrical work dealing with the measures of capacity (compare samples given farther on).

¹ The text is the current one, which is correct just as it stands.

² The text is the current one, which needs no correction : it is only to be noted that the Rig verse has *viparyastau* in the place of the *viparyāsaḥ* of the other.

the south, the opposite is the case: a period of six *muhūrtas* is made out by each such course."

This teaches that the daily lengthening of daytime and shortening of night from the winter to the summer solstice, and vice versa from the summer to the winter solstice, was measured by a *prastha* of water, and that the total lengthening and shortening during each such period came to six *muhūrtas*.¹ As each solstitial period consisted of 183 days according to this work, this gives 183 *prasthas* of water = 6 *muhūrtas* = 12 *nāḍikās*. From this we have 1 *nāḍikā* = $15\frac{1}{4}$ *prasthas*. As may be seen from the table on p. 222 below, $15\frac{1}{4}$ *prasthas* = 1 *drōṇa* less by 3 *kuṭapas*, *kuḍavas*, or *kuḍumbas*, = $\frac{61}{84}$ *drōṇa*.

Thus, in two ways the Jyōtisha gives—

$$1 \text{ } nāḍikā = \frac{61}{84} \text{ } drōṇa \text{ of water.}$$

The statements in the Jyōtisha-Vēdāṅga are not complete, in failing to show how the water was to be used for measuring the duration of the *nāḍikā*; the fact being that the writers of them assumed a knowledge of details which they looked upon as too familiar to need to be mentioned. But a clear light is thrown on them by the Buddhist work, the *Divyāvadāna*, in a chapter of it, the *Śārdūlakarṇāvadāna*, chap. 33, which in some form or another dates from at least the third century A.D., since

¹ The effect of this is that the length of the daytime ranged from 12 *muhūrtas*, = 9 hrs. 36 min., at the winter solstice to 18 *muhūrtas*, = 14 hrs. 24 min., at the summer solstice. Compare *Divyāvadāna*, p. 642, lines 18-21; and *Viṣṇu-Purāṇa*, 2. 8. 31-7. The statement gives, according to the mean or uniform time to which it was adapted, very nearly 47 seconds as the time by which the sun rose earlier or later day by day, and 4.48 a.m. and 7.12 a.m. as the earliest and latest times of sunrise. As has been pointed out by previous inquirers, the result marks approximately the locality in which the rule was framed. Dikshit (op. cit., p. 90) arrived at the close limits of lat. 34° 46' to 55°. Barhaspatya (op. cit., p. 32) has proposed more judiciously the rough wider limits of 32° 30' to 42° 30'.

a text of it was translated into Chinese in that period.¹ The statement here runs as follows:—

Divyāvadāna, edited by Cowell and Neil, p. 644, line 21 ff.:—

Kalānām = ēka-trimśad = ēkā nālikā | tatra dvē nālikē ēkō muhūrtaḥ | nālikāyāḥ punaḥ kiṃ pramāṇam tad = uchyatē | drōṇaḥ salilasya ēkaṃ tad-varaṇatō dvē pala-śatē bhavataḥ | nālikā-chedhidra-sya kiṃ pramāṇam | suvarṇa-mātram = upari chatur-aṅgulā suvarṇa-śalākā kartavyā vṛtta-parimaṇḍalā samantācch = chatur-asrā āyatā | yataś = ch = aiva śīryēta tatas = tōya-ghaṭasya ebhidram kartavyam | ētēna nālikā-pramāṇēna vibhaktē dvē nālikē ēkō muhūrtaḥ | ētēna bhō brāhmaṇa trimśan = muhūrtaḥ | yai rātri-divasā anumiyantē |

"Thirty-one kalās are one nālikā. In that matter, two nālikās are one muhūrta. Again, what is the measure of a nālikā? That is told. A drōṇa of water is one item:² as to its contents, they are two hundred palas. What is the measure of the hole for the nālikā? There should be made a gold pin, of the quantity of a suvarṇa,³ four aṅgulas in length, drawn out quite round or square: and with it there should be made a hole in the bottom of a water-jar, through which, indeed, the water may fall out. Two nālikās determined by this measure of a nālikā are one muhūrta. In this way, O Brāhmaṇ! there are the thirty muhūrtas by which the nights-and-days are measured."⁴

¹ See the editors' remark on p. 655.

² Or correct *drōṇaḥ* into *drōṇam*, or *ēkaḥ* into *ēkaḥ*, and say "one drōṇa of water."

³ There is perhaps something corrupt in the reading *suvarṇa-mātram = upari*. But we cannot doubt that the meaning is that the weight of the gold was to be a *suvarṇa*.

⁴ It may be noted, in passing, that the term *rātri-divasa*, 'night-and-day', reminding us of the Greek *nycthemeron*, is a rather peculiar one

Thus, the Divyāvadāna gives—

1 *nāḍikā* = 1 *drōṇa* of water.

We turn now to the second ancient work mentioned on p. 214 above, which gives an appliance of the same kind but of smaller size.

Kauṭīliya-Arthaśāstra, edited by R. Shamasastri, Mysore (1909), p. 107, line 18 ff.:—

Chatvāriṃśat=kalāḥ *nāḍikā* | suvarṇa-māśhakāś-
chatvāraś=chatur-aṅgul-āyāmāḥ kumbha-chedhi-
dram=āḍhakam=ambhasō vā *nāḍikā* | dvi-nāḍikō
muhūrtaḥ | pañchadaśa-muhūrtō divasō rātrīś=cha |

"Forty *kalās* are a *nāḍikā*:¹ or a *nāḍikā* is determined by four suvarṇa-māśhakas four aṅgulas in length, a hole in a water-jar, and an āḍhaka of water: a muhūrta consists of two *nāḍikās*: a day consists of fifteen muhūrtas; also a night."

The essential part of this passage has been rendered by Mr. Shamasastri thus: ²—

"1 *nāḍikā*, or the time during which one āḍhaka of water passes out of a pot through an aperture of the same diameter as that of a wire of 4 aṅgulas in length and made of 4 māśhas of gold."

for India, where the day has always run from sunrise, not from sunset. Except in the indeclinables *naktāndivasyam* and *rātrīndivam*, 'by night and day', which are taught by Pāṇini, 5. 4. 77, and may be due to euphonic considerations, nothing matching it seems to be found in the Brāhmaṇical books: their terms are *ahō-rātra*, *dina-rātri*, *dya-nāś*, etc., 'day-and-night', with very rarely *ahant*, lit. 'the two days', which seems to be chiefly Vedic, but is found in the Bhāgavata-Purāṇa, 3. 11. 10, 12. The Divyāvadāna has *rātri-dinam* again on p. 642, line 23, and *rātrīndivam* on p. 642, line 17, and p. 643, line 4: but it presents the customary *ahō-rātra* on p. 644, lines 5, 12, 13, and p. 645, line 5.

¹ The Kauṭīliya uses two forms, *nāḍikā* and *nāḍikā*, with a preference for the latter.

² See p. 133 of his translation of the whole work, which will be published shortly brought together in one volume.

Thus, one *ādhaka* being a quarter of a *drōṇa* (see the table on p. 222 below), the Kauṭīliya gives—

$$1 \text{ nāḍikā} = 1 \text{ ādhaka} = \frac{1}{4} \text{ drōṇa of water.}$$

Along with the statement of the Kauṭīliya-Arthaśāstra we have to take that of the Purāṇas. It is found in the Vāyu, Viṣṇu, Brahma, and Bhāgavata, in each case in more or less incorrect terms as given in the printed versions.¹ The text could perhaps be restored, without any substantial doubt, by a collation of those versions. Fortunately, however, the essential part of it has been given in absolutely correct terms by Viṣṇuchitta as a quotation from the Vāyu, in which, indeed, it is found with the nearest approach to accuracy in the printed texts.

The Purāṇas, represented by the Vāyu as quoted by Viṣṇuchitta in his commentary on the Viṣṇu, 6. 3. 7 to 9a :²—

¹ My references are :—(1) The Vāyu, 100. 219b to 221a ; text edited and printed in 1905 in the Ānandāśrama Sanskrit Series, Poona.

(2) The Viṣṇu, 6. 3. 7 to 9a ; text, with the commentary of Ratnagarbha, printed in 1866 at the Vṛttadīpa Press, Bombay ; and text, with the commentaries of Viṣṇuchitta and Śrīdhara, printed in 1910 at the Śrī-Veṅkaṭeśvar Press, Bombay.

(3) The Brahma, 231. 7 to 9a ; text edited and printed in 1895 in the Ānandāśrama Sanskrit Series, Poona.

(4) The Bhāgavata, 3. 11. 9 ; text printed in 1905 at the Nirṇayasāgar Press, Bombay. This statement is particularly imperfect, and also mixed : the first three *pādas* of the verse belong to the ancient form of the water-clock, but the fourth *pāda* to the later form. It is the more surprising because this Purāṇa is very archaic in some of its astronomical passages.

I am indebted to Mr. Pargiter for the references to the Vāyu and Brahma, and to Dr. Barnett for drawing my attention to Viṣṇuchitta's very useful commentary on the Viṣṇu : Śrīdhara and Ratnagarbha are quite misleading in this matter.

² We infer from the Viṣṇu and Brahma that in the Vāyu, also, at some time or another, the two verses quoted by Viṣṇuchitta must have had before them the line *Nāḍikā in pramāṇena*, etc., and after them the line *Nāḍikābhyaṁ=atho deśibhyaṁ*, etc. These two lines, which I give in brackets, are not in the printed text of the Vāyu, and did not come within the scope of Viṣṇuchitta's quotation. I take it that, along with them, the two verses give what was once the standard text of the Purāṇas in this matter.

[Nāḍikā tu pramāṇēna kalā daśa cha pañcha cha ॥]
 Unmānēn=āmbhasaś=ch=āpi palāny=ardha-trayōdaśa ।
 Māgadhiēna tu mānēna jala-prasthō vidhiyatē ॥
 Ētē ch=āpy=udaka-prasthās=chatvārō nāḍikā-ghaṭāḥ ।
 hēma - māshaiḥ kṛita - chchhidraś = chaturbhiś = chatur-
 aṅgulaiḥ ॥
 [Nāḍikābhyān=atha dvābhyān muhūrtō dvīja-sattama ।]

"[A nāḍikā is by measure fifteen kalās]; more-over, by the measure of water it is determined thus: twelve and a half palas;¹ this is laid down to be a prastha of water by the Māgadha measure: four of these prasthas of water make up the water-jar for the nāḍikā; it has a hole made by four māshas of gold drawn out to the length of four aṅgulas: [by two nāḍikās there is made a muhūrta, O best of the twice-born]."

From what date exactly this statement comes, it is difficult to say: but it is to be noted that the Purāṇas in their account of the subdivisions of time, in which this passage stands, do not seem to know the division of the nāḍikā into 60 vināḍikās, and still less that of the ghaṭī, ghaṭikā, into 60 palas each of 60 vipalas; these are features of the later Indian astronomy. In any case, since 4 prasthas = 1 ādhaka (see the table on p. 222 below), this description gives a water-clock of the same kind and size with that of the Kauṭīliya.

Thus, from the Purāṇas, also, we have—

$$1 \text{ nāḍikā} = 1 \text{ ādhaka} = \frac{1}{4} \text{ drōṇa of water.}$$

To complete the case, we have to note next what we learn from the Kauṭīliya in the course of another chapter, dealing with weights and measures.

¹ The commentators carefully explain *ardha-trayōdaśa* by *sīrdha-dvaidāśa*; and Viśvachitta and Śrīdhara give grammatical explanations of the term.

We learn there, in the first place (text, p. 103, lines 3, 4), in respect of weights, that 1 *suvarṇa* = 16 *suvarṇa-māśhakas*. So, also, the Divyāvadāna tells us (p. 645, line 20) that 1 *suvarṇa* = 16 *māśakas*.¹ From this we see that the amount of gold prescribed by the Divyāvadāna and apparently used also for the purposes of the Jyōtisha-Vedāṅga, namely 1 *suvarṇa*, for making the tool with which the water-jar was to be perforated, was four times as much as that required, namely 4 *suvarṇa-māśhakas*, in the case of the Kauṭīliya and the Purāṇas. This is in proportion to the different quantities of water prescribed in the two cases.

We learn further (text, p. 104, line 16 ff.) that in the measures of capacity there were four *drōṇas*, of respectively 200, 187½, 175, and 162½ *palas* as determined by *māśhas* of grain; and that each variety of *drōṇa* was divided into 4 *āḍhakas*, each *āḍhaka* into 4 *prasthas*, and each *prastha* into 4 *kuḍumbas*: also, that 16 *drōṇas* were one *khāri*.²

Taking the *drōṇa* of 200 *palas* as is required, we have the following table, which is of general application, except for the line of *palas*:—

pala ...	...	3½ ...	12½ ...	50 ...	200 ...	3200
kuḍumba ...	1 ...	4 ...	16 ...	64 ...	1024	
prastha ...	...	1 ...	4 ...	16 ...	256	
āḍhaka ...	...	...	1 ...	4 ...	64	
drōṇa ...	...	...	...	1 ...	16	
khāri ...	...	...	...	...	...	1

With this we may compare Bhāskarāchārya's Līlāvati (about A.D. 1150), chapter 1, verses, 7, 8.³ This passage does not include the *pala*: but it adds something that we

¹ The Divyāvadāna has *māśaka* as its form of *māśhaka*.

² The text and translation have *nāri*: but the real word is certainly *khāri*.

³ Colebrooke's translation, edited, with text and notes, by H. Ch. Banerji, Calcutta, 1893.

need for comparative purposes farther on, and tells us (1) that a Māgadha *khārī*, used in measuring "grain, etc.", was of the measure of a cubic *hasta* or cubit; and (2) that $1 \text{ drōṇa} = \frac{1}{8} \text{ khārī}$, $1 \text{ āḍhaka} = \frac{1}{4} \text{ drōṇa}$, $1 \text{ prastha} = \frac{1}{4} \text{ āḍhaka}$, and $1 \text{ kuḍava} = \frac{1}{4} \text{ prastha}$.¹

Combining all the information given above, we find that the requisites for thus measuring the duration of a *nāḍikā* were:—

1. According to the Divyāvadāna, a *drōṇa* of water: according to the Jyōtisha-Vēdāṅga, a *drōṇa* less by 3 *kuṭapas*, *kuḍavas*, or *kuḍumbas*, i.e. $\frac{21}{24} \text{ drōṇa}$: and according to the Kauṭīliya and the Purāṇas, an *āḍhaka*, i.e. $\frac{1}{4} \text{ drōṇa}$.

2. A water-jar, with a hole, evidently in the bottom of it, which was made by a pin, needle, wire, or rod,² 4 *aṅgulas* or finger-breadths (3 inches) in length, which was drawn out from a piece of gold which weighed according to the Divyāvadāna 1 *suvarṇa*, and according

¹ We may also compare, from Western India, Mahāvīra's Gaṇitasāra-saṃgraha (of the period A.D. 815-77), text and translation, with notes, by M. Rangacharya, Madras, 1912, chapter 1, verses 36-8. This tells us that 4 *śhēḍaśikās* = 1 *kuḍaha* (v.l. *kuḍava*), 4 *kuḍahas* (v.l. as before) = 1 *prastha*, 4 *prasthas* = 1 *āḍhaka*, 4 *āḍhakas* = 1 *drōṇa*, 4 *drōṇas* = 1 *māni*, and 4 *mānis* = 1 *khārī*. Except for introducing the *māni*, this statement matches those of the Kauṭīliya and the Līlāvati from the *kuḍumba*, *kuḍava*, to the *khārī*. The reading *kuḍava* seems better than *kuḍaha*.

² The term for the piercing-tool in the Divyāvadāna (p. 218 above) is *śulbā*, 'a rod, pin, needle'. Elsewhere, in some of the later passages, use is made of *śūkhī*, *śūkhī*, 'a needle', and *nala*: this last word seems to be used mostly in the sense of 'a hollow reed or stalk, a tube'; but there was obviously nothing hollow about the instrument that was used for piercing the water-jar.

According to the same work, the instrument might be either round or square: at least, I do not see what other meaning than 'square' may be given to *chatur-śrī*. One would think, however, that it would ordinarily be round.

to the Kauṭīliya and the Purāṇas 4 *suvarṇa-māśakas*, i.e. $\frac{1}{4}$ *suvarṇa*.

This was a much more simple appliance than the later one (p. 213 above), in not needing to be made of any particular substance, weight, shape, and size : the ordinary earthen water-jar (*kumbha*, *ghaṭa*) served the purpose. That it worked by discharging water, not by drawing it in as did the later Indian water-clock, is made clear, apart from what a little reflection indicates, by the words of the Divyāvadāna. It is also shown, as may be seen hereafter, by some of the later passages, which, mentioning this original form of the appliance, use the verb *nih-sri*, 'to go, issue, flow out', instead of the *śrī*, 'to fall out or off', of the Divyāvadāna.

This water-clock was supposed to give exactly the duration of a *nāḍikā*, that is, 24 minutes : and it did so, no doubt, closely enough for all general purposes, including those of the primitive astronomy and astrology of that period. But we can hardly avoid noting that, if the $\frac{3}{4}$ *drōṇa* prescribed by the Jyōtisha-Vēdāṅga did give exactly a *nāḍikā*, then the full *drōṇa* laid down by the Divyāvadāna, and the *ādhaka* or $\frac{1}{4}$ *drōṇa*, with the smaller hole, ordered by the Kauṭīliya and the Purāṇas, would give a period longer by nearly 1 min. 11 seconds. Further research may possibly show that the hole in the Jyōtisha's water-jar was made slightly smaller, to match the slightly smaller quantity of water, than that in the water-jar of the Divyāvadāna. But it is also possible, and in fact more likely, that the Divyāvadāna, the Kauṭīliya, and the Purāṇas were satisfied with a *vyāvahārika* or rough practical measure of the *nāḍikā*, without aiming at the technical precision of the Jyōtisha.

There were, of course, no means of really checking the accuracy of the results given by this appliance. They might be tested to a certain extent, by noting how many

times the water-jar had to be filled during some part of the day as measured by the shadow of the gnomon, or between one sunrise and the next one; or, as we learn from one of the later passages, by comparing its measure of the *nāḍikā* with the time occupied in reciting sixty times a stanza of sixty long syllables. But any such means can hardly be looked upon as anything but very rough ones.

It may be interesting to note in easily intelligible terms of our British measures the quantity of water that was used in this operation for marking the duration of a *nāḍikā*. We have to determine this on three lines.

A. According to the Divyāvadāna, the quantity was 1 *drōṇa*, = 200 *palas*, without any deduction.

A *drōṇa* was the sixteenth part of a *khārī*. And we learn from Bhāskarāchārya (see p. 223 above) that in the Māgadhā measure, which is certainly the one that was followed in this matter, the capacity or volume of a *khārī* was that of a cubic vessel measuring one *hasta* or cubit in each direction.

With the *hasta* taken at 18 inches,¹ the capacity of the *khārī* was 5832 cubic inches; and that of the *drōṇa* was 364½ cubic inches, which gives a cubical vessel a trifle more than 7½ inches in each direction.

Our standard of capacity, the gallon, contains 10 pounds avoirdupois, = 160 ounces, of distilled water weighed in air against brass weights with the water and air at a temperature of 62° Fahrenheit and the barometer at 30 inches, and occupies 277·274 cubic inches;² which gives a cubical vessel a trifle more than 6½ inches in each direction.

¹ See JRAS, 1912, p. 233.

² See, e.g., Whitaker's *Almanack*, 1915, p. 450.

From these figures we have:—

	cubic inches	
1 <i>drōṇa</i>	=	364·5
deduct 1 gallon	=	277·274
		<hr/>
		87·226
deduct $\frac{1}{4}$ gallon	=	69·3185
		<hr/>
		17·9075
deduct $\frac{1}{2}$ pint	=	17·329625
		<hr/>
		·577875
deduct $\frac{1}{80}$ pint	=	·57765416
		<hr/>
remainder in excess		·00022083

Thus we arrive at 1 *drōṇa* = 10 $\frac{1}{2}$ imperial pints plus a very little more than $\frac{1}{80}$ pint; or say:—

1 *drōṇa* of water = a little more than 10 $\frac{1}{2}$ pints.

B. According to the *Jyōtisha-Vēdāṅga*, the quantity of water was 1 *drōṇa* less by 3 *kuḍapas*, *kuḍavas*, or *kuḍumbas*; that is $\frac{3}{4}$ *drōṇa*, = 190 $\frac{1}{2}$ *palas*.

From the same basis, 1 *drōṇa* = 364 $\frac{1}{2}$ cubic inches, we have:—

	cubic inches	
$\frac{3}{4}$ <i>drōṇa</i>	=	347·4140625
deduct 1 gallon	=	277·274
		<hr/>
		70·1400625
deduct $\frac{1}{4}$ gallon	=	69·3185
		<hr/>
deduct this		·8215625
from $\frac{1}{40}$ pint	=	·86648125
		<hr/>
remainder in deficiency		·04491875

Thus we arrive at $\frac{3}{4}$ *drōṇa* = 10 pints plus a little less than $\frac{1}{40}$ pint; or say:—

$\frac{3}{4}$ *drōṇa* of water = a little more than 10 pints.

C. According to the Kauṭīliya-Arthaśāstra and the Purāṇas, the quantity of water was 1 *ādhaka*, = 50 *palas*. Since this = $\frac{1}{4}$ *drōṇa*, and a *drōṇa* of water, as we have seen, was a little more than $10\frac{1}{2}$ pints, we have—

1 *ādhaka* of water = a trifle more than $2\frac{5}{8}$ pints.

As regards another detail, since 200 *palas* of water = 1 *drōṇa*, and 1 *drōṇa* = $10\frac{1}{2}$ pints plus a very small excess which we may disregard here, and 1 pint = 20 oz. avoirdupois, we have 200 *palas* = 210 oz.; and so we may say:—

1 *pala* of water = a trifle more than $1\frac{1}{20}$ oz.,
= 459 $\frac{3}{4}$ grains, or say practically 460 grains.¹

It is not so easy to estimate the size of the pin, needle, wire, or rod, which was to be used for piercing the bottom of the water-jar. But the case seems to be much as follows.

In the Indian measures of gold, silver, and copper, the unit of weight seems to have been always the *guṇjā*, *krishṇala*, or *raktikā*, the modern *ratī*, the red seed, tipped with black, of the *guṇjā*-plant or Wild Liquorice, *Abrus precatorius*.²

Mr. E. Thomas in 1864 arrived at the conclusion, but without showing any very particular reason for it, that the early standard weight of the *ratī* should be taken at 1.75 grains.³

¹ As checked by another process, namely, 1 *drōṇa* = 364 $\frac{1}{2}$ cubic inches = .2109375 cubic foot \times 62.321 lb. (weight of one cubic foot of water: see *Whitaker*, p. 451) \div 200 *palas*, the amount by which 1 *pala* exceeds 1 $\frac{1}{20}$ oz. is .001666875 oz.

² These seeds, which come also from the West Indies, are probably familiar to my readers. Chambers's *Encyclopædia*, vol. 8, p. 382, says about them:—"Prayer Beads, a name given to the polished seeds of a West Indian leguminous plant, *Abrus precatorius* or Wild Liquorice, formerly much used for stringing into rosaries, necklaces, etc."

³ JASB, vol. 33, p. 260, note 28. Compare the tables in his *Ancient Indian Weights* (1874), p. 13: the weights are given there in "grs. Troy": but that is not necessary, as the grain is the same whether for troy or for avoirdupois; it is in the ounce that the difference in the two scales comes in.

Sir A. Cunningham endorsed that result in 1873: partly from experiments made by himself, partly from an average of estimates given by earlier inquirers, he arrived at an average of 1·8093 as "the true value of the actual *ratī*;" but he found it then "extremely convenient and sufficiently accurate to accept Thomas' valuation for all practical purposes."¹ In 1891, however, he adopted the value of 1 *ratī* = 1·80 grains, as led up to by further investigation.² It seems best to accept this latter value here.

Now, the Kauṭīliya tells us (text, p. 103, lines 3, 4) that 10 *dhānya-māshas* or *māshas* of grain, or 5 *guṇjās*, i.e. *kṛishṇulas*, *raktikās*, *ratīs*, = 1 *suvarṇa-māshaka* or *māshaka* of gold, and 16 *suvarṇa-māshakas* = 1 *suvarṇa* or *karsha*.³ So also, as has been said (p. 222 above), the Divyāvadāna gives 1 *suvarṇa* = 16 *māsakas*.

The piercing-tool for making the hole in the bottom of the water-jar for the purposes of the Divyāvadāna, and apparently also the Jyōtisha-Vēdāṅga, was made from 1 *suvarṇa* of gold drawn out to the length of 4 *aṅgulas* or finger-breadths (3 inches). With 1 *ratī* = 1·80 grains, we have 1 *suvarṇa-māshaka* = 5 *ratīs* = 9 grains, and 1 *suvarṇa* = 16 *suvarṇa-māshakas* = 144 grains. The weight of a British sovereign is 123·27447 grains; ⁴ one-sixth thereof is 20·54574 grains: and the sum of the two is 143·82021 grains. So we may say that the 1 *suvarṇa* of gold represented a piece a trifle (say 18 grains) larger than 1½ of a sovereign.

For the purpose of the Kauṭīliya-Arthasāstra and the Purāṇas, the piercing-tool was made from 4 *suvarṇa-māshakas* = 36 grains of gold (one-fourth of a *suvarṇa*,

¹ *Num. Chron.*, new series, vol. 13, p. 197: I quote from p. 11 of a reprint bound in at the end of his *Coins of Alexander's Successors*.

² *Coins of Ancient India*, p. 44, and see the tables on pp. 46, 47, 59.

³ Compare the Mānava-Dharmasāstra, 8. 131 ff., and the Yājñavalkya-Smṛiti, 1. 361 ff., as quoted by Dr. Barnett in his *Antiquities of India*, p. 206: for the Kauṭīliya tables see p. 210.

⁴ *Whitaker's Almanack*, 1915, p. 462.

in the same proportion with the smaller quantity of water), drawn out to the same length, 3 inches. The weight of a half-sovereign is 61.63723 grains. Half of this is 30.818615 grains. And so we may say that the 4 *māshakas* of gold represented a little more than 5 grains more than half of a half-sovereign.

It hardly seems practicable to determine by calculation the respective sizes of the holes which would be made by the two piercing-tools of these weights and size. But the holes were evidently very small ones.

That practical use was made of this water-clock in everyday life, is shown by some other passages in the Kautīliya on which Mr. Pargiter contemplates writing a paper. Without trespassing on his ground, I may add the following remark.

With a view to regulating the occupations of the king, his day and night were each divided into eight periods, theoretically each equal to 90 minutes, which we may call "half-watches": and one way of doing that was "by the *nādikās*," of course as determined by the water-clock.¹ It is not unreasonable to think that, for that

¹ This period of 1½ hours seems at first sight a rather curious one for India, because it is not measurable by any even number of *nādikās* or *mahūrtas*, and the hour only became known in India about A.D. 350-400, and even then was taken over only as an astrological item: it is only in quite modern times that the hour has been adopted in India as a division of time for practical purposes. But the matter is cleared up when we reflect that each such period is half of the *prahara* or *yāma*, the "watch" of three hours, the one-fourth division of the daytime and the night, which must have been fixed in very ancient times, because, even before the invention of the gnomon or any other appliances, it could be determined during the daytime, quite closely enough, by simple eye-observation of the position of the sun, on the horizon, half-way up, and at the zenith.

For the *prahara* as the eighth part of an entire day-and-night, see, e.g., Bhaṭṭotpala under Brihat-Saṃhitā, 24, 10; and for the *yāma* as the fourth part of a day and of a night, see, e.g., the Bhāgavata-Purāṇa, 3. 11. 10. For the identity of the *prahara* and the *yāma*, see also Amarakōśa (Bombay, 1896), p. 24, verse 6; and Abhidhānāchintāmaṇi, verse 145.

purpose, enough water was used to measure the half-watch, = $3\frac{1}{2}$ *nāḍikās*, or even the full watch, = $7\frac{1}{2}$ *nāḍikās*, straight away without any refilling.¹ That would need a much larger water-jar. And it seems likely that a remnant of a jar which was actually so used has been found, and is perhaps still preserved at Wāḷā in Kāthiāwār.

In the *Ind. Ant.*, vol. 14, p. 75, there was brought to notice a fragment of what seems to have been a "huge" earthen water-pot, bearing an inscription which gives the name of "the glorious Guhasēna" (one of the Maitraka rulers of Valabhi), with the date of "the year 247", = A.D. 566-67, followed by *ghaṭā* It seemed, at the time, curious to find such a record on such an article. But it appears, now, likely enough that we have here part of a water-jar, belonging to the royal household, which was actually used for measuring time in the days of Guhasēna.

¹ We may also imagine some such arrangement as follows. Take four water-jars, A, B, C, and D, each fitted with some appliance, which can be removed at once when wanted, for plugging or covering the hole in the bottom. Put D aside, and place A, B, C one above the other on a stand; A, at the top, having in it the water for measuring a half or a full watch. At the given moment set A discharging water into B; and when B is full, set the latter discharging into C. Then remove A, and replace it by D, filled meanwhile with the proper quantity of water. When C is full, set D discharging into B; remove C and replace it by A, empty; and add to C any small quantity of water wanted to make up any loss caused by waste or evaporation, so that it will be ready to take its turn at the top. Compare a form of the Chinese water-clock mentioned in this Journal, new series, vol. 18 (1886), p. 14; namely, bronze vessels arranged in successive steps as on a staircase (and connected, it is to be presumed, by pipes and taps).

XIII

THE TREASURE OF AKBAR

By VINCENT A. SMITH

THE unsatisfactory modern compositions in European languages which profess to treat of the life and reign of Akbar all omit many things which ought to be mentioned, and fail to give a true view of Akbar's personality. The design of writing a life of Akbar more veracious than any now current has long been present to my mind, but may never be fulfilled, although I have made considerable collections for the purpose. However that may be, it seems worth while to devote a special article to the consideration of the enormous cash reserve accumulated by Akbar, which is one of the numerous facts of importance neglected by historians and biographers.

The details are to be found in the writings of three European authors, namely, De Laët, the Dutchman, who wrote in Latin, and published his book in 1631; Mandelslo, the German, whose writings, largely added to by editors, appeared in various forms between 1646 and 1659; and Father Manrique, the Spaniard, who was at Agra in December, 1640, and printed his book in Spanish at Rome in 1649. The works of all the three authors are scarce and difficult of access, except in large public libraries. Before proceeding to discuss the substance of the information given concerning Akbar's treasure, it will be necessary to investigate the amount of credit due to each author, and to see how far the statements of the three were made independently.

Joannes, or John, De Laët, a learned and copious author, died in 1649. The work which here concerns us is

a small duodecimo, issued by the Elzevir Press, and bearing the date 1631. The title is—

"*De Imperio Magni Mogolis, sive India Vera,
Commentarius e variis auctoribus congestus.*

Cum Privilegio.

Lugduni Batavorum,

Ex officina Elzeviriana

Anno MDCCCXXI."

The work exists in two issues, both bearing the one date, 1631. The earlier issue has 299 pages, excluding the index, while the later, and better printed, has only 285. The sole difference in the contents is that the reprint at p. 278 contains the additional passage imputing the crime of incest to Shāhjahān after the death of his consort Mumtāz Mahall in July, 1631. I have discussed that subject at length in my article entitled "Joannes De Laët on India and Shāhjahān" in *Ind. Ant.*, Nov. 1914, vol. xliii, pp. 239-44. A further note dealing with Peter Mundy's reference to the scandal will appear in a subsequent number of the same periodical from the pen of Sir Richard Temple. De Laët's little book consists of two parts, namely: I. *Indiæ Veræ Descriptio*, pp. 1-162 of the reprint; and II. *Fragmentum Historiæ Indiæ, quod à nostratibus acceptum è Belgico Latinum fecimus*, which occupies the rest of the book. Each part has a separate preface. Part i is a compilation carefully made, chiefly from the works of Purchas, Sir Thomas Roe, Peter Texeira, the Portuguese, and unnamed Dutch informants. Part ii is a contribution by Peter van den Broecke, who administered the business of the Dutch East India Company at Sûrat in 1620 and later. His Dutch text was translated into Latin by De Laët. The narrative of van den Broecke comes down to 1628. The passage concerning the treasure of Akbar is in chapter vii of the *Descriptio*, which is entitled "*De Opulentia hujus Principis*", pp. 136-45 of the reprint,

which probably was issued in 1632, although bearing the date 1631. The inventory of the treasure is introduced by the words—

"Achabare principis qui hodie rerum potitur, avo decedente, rationibus accuratissime subductis, constitit, thesauros ipsius in auro, argento, aere facto atque infecto, in gemmis et supellectile omnis generis, ascendisse ad xxxiv Caroras, lxxxii Lackas, et xxvi mill. cccclxxxvi rupias; sive ad Rupias 348,226,386 $\frac{1}{4}$, nempe in numismate signato omnis generis Rupias 198,346,666 $\frac{1}{4}$, hoc pacto."

Or in English—"At the time of the decease of Akbar, grandfather of the monarch now in power [*scil.* Shāhjahān], it was established from registers drawn up with the greatest accuracy, that his treasures in gold, silver, brass [or 'bronze', or 'copper'] wrought and unwrought, in gems and furniture of every kind, came to 34 *karōrs* ('crores'), 82 *lakhs*, and 26,386 rupees; or to rupees, 348,226,386 $\frac{1}{4}$; that is to say, in coined money of every kind to rupees 198,346,666 $\frac{1}{4}$, in this manner."

Details follow, and will be translated presently.¹

John Albert de Mandelslo, a native of Mecklenburg, was a gentleman page in the service of the Duke of Holstein. When the Duke, in 1635, resolved to send Philip Crusius and Otton Brugman as his ambassadors to the courts of Russia (Muscovy) and Persia, young Mandelslo, then 20 years of age, was permitted to "put off the quality of page", and join the embassy as a gentleman of the retinue or attaché. Subsequently, he was allowed to make a tour in India on his own account during the year 1638, in the reign of Shāhjahān.

A work purporting to record Mandelslo's *Travels into the Indies* was appended by Olearius, secretary of the embassy, to his own learned treatise descriptive of the ambassadors' doings and of the countries which they visited. In a separate paper² I have proved conclusively

¹ My references are made to the reprint because I happen to possess a copy of it. The India Office Library has both issues.

² "The Credit due to the book entitled *The Voyages and Travels of J. Albert de Mandelslo into the East Indies*": JRAS., 1915, p. 245.

that only a small and interesting part of the *Travels* attributed to Mandelslo is from the pen of the nominal author. At least two-thirds of the book in its later English form (1669) have been interpolated by editors, namely, Olearius (1656) and de Wicquefort (1659).

Anybody reading merely the text of either the French translation of 1659 or the English versions of 1662 and 1669 would naturally believe that Mandelslo himself obtained and inserted the inventory of Akbar's treasure. De Wicquefort, placing the year 1638 in the margin, writes: "ie suis assez heureux, pour avoir entre les mains l'inventaire du tresor, qui l'on trouva apres la mort du Schach l'Achobar, si fidellement fait, que ie l'ay bien voulu ajouter icy, pour la satisfaction du lecteur." John Davies (1669) also puts the year 1638 in the margin, and writes: "I have an Inventory of the Treasure which was found at the death of *Schach Achobar*," etc.

Those statements seem to have been intended deliberately to give the reader the impression that the inventory was obtained personally by Mandelslo in 1638. But, as a matter of fact, the inventory is not in the German edition of 1656 from which de Wicquefort made his much interpolated translation. It must, therefore, have been inserted by de Wicquefort himself, and copied from some printed book. The only two possible known sources are De Laët (1631) and Manrique (1649). Certain indications suggest that de Wicquefort took his information from Manrique. Whether or not he actually did so, the testimony of the pseudo-Mandelslo cannot be cited as that of an independent authority for the amount of Akbar's treasure, which rests on the evidence of De Laët (1631) and Manrique (1649).

Fray (*scil.* "Brother" or "Friar") Sebastian Manrique, of the Augustinian order, served for thirteen years as a missionary in India and other parts of Asia. In 1649 he published at Rome, in the Spanish language, a book

entitled *Itinerario de las Misiones que hizo el Padre F. Sebastian Manrique, religioso eremita de S. Agustin, misionario apostolico treze años en varias misiones del India Oriental, y al presente Procurador* [scil. "proctor"] *y Diffinidor* [scil. "member of governing chapter"] *General de su Provincia de Portugal en esta Corte de Roma. Con una sommaria relacion del grande y opulento Imperio del Imperador Xa-ziahan Corrombo* [Shāhjahān Khurram] *Gran Mogol, y de otros reys infieles* ["heathen kings"], *en cuyos reynos assisten* ["serve"] *los religiosos de S. Agustin.* The book contains 470 pages of text in quarto, printed in double columns, and divided into 89 chapters. It was reprinted at Rome in 1653 with the same paging, but a slightly different title-page.¹

It would lead me too far from the subject now in hand to discuss the high value obviously possessed by Manrique's work, but it may be affirmed with confidence that the *Itinerario* well deserves translation and competent editing. Although I do not profess to know Spanish, the language used by the traveller is so closely akin to Latin and Italian that I have experienced little difficulty in getting at the sense of any passage.

Chapters lxxiv-lxxvi are devoted to a general description of Shāhjahān's dominions, as in 1640. Chapter lxxiv discusses the government and riches of the empire; chapter lxxv continues that subject and gives details of the army and navy; chapter lxxvi contains the inventory of the Agra treasure and many other matters of interest.

On p. 404 the author tells us that he gained the special friendship of an officer whom he calls Mirzā Camerane, who was in charge of the *Nacassār* of Rājmahāl. He defines the "*Nacassāres Reales*" as being "*las casas, de*

¹ Both impressions are very rare. I have never known a copy of either to be offered for sale. The British Museum possesses both. The Bodleian has the 1640 impression, and All Souls College, Oxford, has that of 1653. I believe there is a copy of one or other in Calcutta.

donde se depositan las rentas, y entradas anuales de aquella Magestad". That is to say, the Royal *Nacassars* are the buildings for the deposit of the rentals and annual revenues of that realm.¹ The officer put an eunuch on duty to give Manrique all possible help. The father, having given the eunuch a handsome fee (*bien regalado*), was well served, and was allowed to examine the official register which gave full particulars of the revenues of all the kingdoms and lands belonging to the empire. The register was a folio book, more than two fingers thick, written in the Hindustani character, of which Manrique had some knowledge. In chapter lxxvi, p. 409, he mentions that he had also obtained official information from the registers at Multân and Kandahâr, as well as from those of Râjmahâl. He refers several times to the "libro citado" seen at Râjmahâl, and states that he spent much labour in copying from it.

The detail of the Agra treasure in chapter lxxvi, consequently, is official and trustworthy. The inventory agrees substantially with that given by De Laët, except that it omits the fraction $\frac{1}{2}$ at the end of the total of the cash, and occasionally describes the items with slightly greater fulness. Manrique's inventory is clearly quite independent of De Laët's copy. I cannot ascertain how De Laët obtained his, but he probably got it through his Dutch friends at Surat.² There was no difficulty in obtaining copies of official documents. Mandelslo, or more likely his editor, observes (ed. 1669, p. 41) that "There is no, ever so secret transaction, but a man

¹ What is the derivation of the form *Nacassâr*? Can it be a derivative from *naksha*, "register"?

² De Laët certainly had the use of some official documents, because on p. 147 he says that he took the list of Amirs, Mansabdârs, and Ahadis, with the numbers of elephants, camels, and other animals, as in Jahângir's reign, from the fragment of an Indian chronicle ("Haec è fragmento chronici ipsorum accepimus"). He also gives the strength of Jahângir's field armies sent to the Deccan in 1609 and 1610. The figures must have been obtained from an official paper.

may have the particulars thereof, if he hath money to bestow among those who have the transcription and dispatch of them." That statement, no doubt, is perfectly true.¹ We thus have two independent copies of the official inventory of Akbar's treasure agreeing to a rupee, of which one was obtained by De Laët prior to 1631, while the other was copied at Rājmahāl by Manrique in or about 1640.

The pseudo-Mandelslo most likely took his copy from Manrique. He may have used De Laët also. It is unnecessary to transcribe the details given by Manrique, as it is more convenient to use De Laët's Latin. There is no material discrepancy.

The words introducing the inventory have been already quoted. The list itself may be translated as follows (from second issue, pp. 138-45):—

- "I. Gold coins. The King had arranged for striking some of these weighing 100 *tolas* each, or 1,150 *māshas*; some also weighing 50 and 25 [*tolas*]; "all of which, when reckoned according to the true weight of *māshas*, weighed 6,970,000 *māshas*, and, at the rate of 14 rupees to a *māsha*, were worth altogether 97,580,000½
- II. Silver coin, or Akbari rupees, were worth 100,000,000
- III. Bronze (*anea*) *paisā* or pice, numbering 230,000,000, which at the rate of 30 *lakās* per rupee, make in all rupees 766,666½

Thus, the whole, as above [rupees] 198,146,666½

¹ De Laët writes to the same effect: "Ceteri fere principes secreto res suas peragunt, hic vero omnia regni negotia propalam discutuntur, nequidem ea que intra conclave peraguntur, curiosos latere possunt, exiguo modo donario scribis illius indulto" (p. 114).

² The 230,000,000 should be 23 millions. $23000000 = 766,666\frac{1}{2}$. The pseudo-Mandelslo has the same mistake as to the millions. He reckons the $\frac{1}{2}$ fraction as "twenty pence," *scil. lakās*, at 30 to the rupee. I abstain purposely from discussing numismatic questions suggested by the extracts.

All the authorities (De Laët, Manrique, and pseudo-Mandelslo) agree in the total of the cash, except that De Laët adds the fraction $\frac{3}{4}$, from the item of gold coin. He also neglects the fraction of $\frac{3}{4}$ or "twenty pence" in item III, given by "Mandelslo".

Ample evidence exists that during the reign of Shāhjahān (1627-58), when commerce with Europe was active, the normal rate of exchange was 2s. 3d. to the rupee, or, in other words, that the rupee was equivalent to half of a French crown (*écu*), then worth 4s. 6d.¹ In Akbar's time (1556-1605) the trade with European countries had been but slightly developed, and the evidence as to the value of the rupee in English money is, consequently, less definite. According to De Laët (reprint, p. 135) the rupee ranged in value from 2s. to 2s. 9d. His words are: "Argentea autem per *Rupias*, quæ communiter valent duos solidos et novem denarios Angl. interdum etiam tantum duos"; that is to say, the rupee was ordinarily worth 2s. 9d., but sometimes only 2s. A few lines farther down De Laët values the *Mahmūdī* current in Gujarāt at an English shilling, and the rupee at 2s. 3d. The *dīnār* (*dīna*), or gold mohur, was worth 30 rupees. Those statements do not refer to any definite reign or date. Hawkins reckoned the rupee as equivalent to 2s. early in the reign of Jahāngīr.² These facts indicate that the rupee in Akbar's time could not be valued at less than 2s. The total cash at Agra in 1605, therefore, was worth in round numbers 19½ millions pounds sterling at the least, and if the rupee be valued at 2s. 3d. the Agra treasure was worth considerably more than 22 millions sterling. That figure, 22 millions, may be taken as approximately correct.

¹ Tavernier's *Travels*, trans. V. Ball, vol. i, p. 26 and appendix.

² Hawkins was at Agra from 1609 to 1611. He reckons two rupees as equal to one "Rial of eight" and 1,000 rupees as equivalent to £100 (*Purchas his Pilgrimes*, ed. Maclehoze, vol. iii, pp. 39, 40).

But, although Agra was the chief treasure-city of the empire, and, as Hawkins puts it, "the heart" of the Mughals' kingdom, there were six other treasure-cities, namely, Gwālior; Narwar, in the Gwālior territory; Ranthambhōr, in Rājputāna; Asīgarh, on the Deccan road, now in the Nimār District, Central Provinces; Rohtās, in South Bihār; and Lahore, in the Panjāb. The accumulations at Lahore and Gwālior were specially larger. When Agra alone stored 22 millions sterling in cash, it is a modest estimate to assume that the other six treasure-cities had 18 millions between them. On that assumption, the cash treasure at Akbar's death in 1605 must have amounted to the gigantic sum of 40 millions sterling.

When Queen Elizabeth died two years earlier, she seems to have left no cash to signify. The authorities, as an expert kindly informs me, comment freely on the number of dresses that she left behind her, but say nothing about treasure. She was short of money throughout her reign, and three years after her death her successor's treasury was almost empty. Her grandfather, Henry VII, when he died in 1509, had a store of £1,800,000, and on the strength of that was considered to be an exceptionally rich prince. When that figure is compared with Akbar's forty millions, it is not surprising that Purchas should have feared that his readers would disbelieve the accounts of the Mughal's wealth as reported by Hawkins. But the good parson tested his authorities carefully, and says: "My jealousy hath made me very inquisitive of such as have lived there in the ministry, factory, soldiery—all which affirm that Captain Hawkins hath written with the least" (*scil.* "minimized").¹

It is difficult to estimate what would be the modern equivalent of forty millions sterling in India in 1605, but there can be no doubt that the purchasing power of money was then much greater than it is now. If we

¹ *Purchas his Pilgrimes*, p. 40 in Wheeler's reprint.

assume that forty millions in 1605 were of as much value for purchasing as two hundred millions are in 1914, the assumption probably will be below rather than above the truth.

The treasure accumulated by Akbar was much increased during the comparatively peaceful reigns of Jahāngir and Shāhjahān. "Mandelslo" (ed. 1669, p. 39) writes—

"There is also within this Castle [Agra] another Appartment, which is known by a great Tower, the covering whereof is of Gold, which shews what excessive wealth is enclosed within it, in eight spacious Vaults, which are full of Gold, Silver, and precious Stones, whereof the value is in a manner inestimable. I was credibly informed, that the *Mogul*, who lived in my time [Shāhjahān], had a Treasure, which amounted to above fifteen hundred millions of Crowns" (or 8,000 millions of rupees).

That estimate, whether recorded by Mandelslo himself or by one of his editors, does not profess to be official, and is hardly credible. Whatever the exact figure should be, there can be no doubt that the treasure of Shāhjahān vastly exceeded that of Akbar.

A large proportion of the store must have been dissipated in the war of succession which followed Shāhjahān's death, and during the twenty years of futile warfare waged by Aurangzeb in the Deccan; but, nevertheless, when Aurangzeb's son and successor, Shāh Ālam or Bahādur Shāh I, secured Agra, he found in the vaults there much treasure with which to reward his adherents. Mandelslo (or his editor) explains that the ordinary revenue was usually expended each year, the store of treasure being derived from escheats and presents. The Pādshāh regarded himself as the heir to all persons deceased, great or small ("non modo magnatum, sed et inferiorum hæres est ipse," as De Laët puts it). The huge value of the presents continually brought is established by all the authorities.

It is thus apparent that the "Great Moguls", from Akbar to Aurangzeb, or, at any rate, to the middle of

Aurangzeb's reign, had an ample reserve of cash available whenever they chose to open the vaults of the treasure-cities. The regular revenue sufficed for the ordinary needs of the government. The uncounted millions which Akbar spent on his freak-city of Fathpur-Sikri probably were taken for the most part from the vaults, and when Shāhjahān chose to expend the sum of four millions sterling, more or less, on the Taj, he was in a position to do so without causing the slightest inconvenience to the administration. The Mughal Pādshāhs did not expend any really large sums on reproductive works, or even on works of general utility. Their delight was to lavish money with both hands on buildings and gardens which gratified their personal vanity or taste. Happily, their taste was usually good, so that their selfish extravagance resulted in creations which are still the delight of the world. The practice of burying scores of millions of pounds in the vaults of fortresses, however silly it may look from the point of view of the modern financier, was in accordance with the Muhammedan law forbidding the taking of interest, and did not seem absurd even to contemporary European observers. Permanent state loans and the other machinery on which the solvency of great states now depends were then unknown.

The detail of Akbar's stores, other than coin, kept at Agra alone, deserves record as proof of the enormous resources at his command. The inventory of the stores at other places has not been preserved. The items as given by De Laët are—

	Rupees.
IV. Diamonds, rubies, emeralds, sapphires, pearls, and similar gems	60,520,521
V. Wrought gold, including jewels of every kind wrought by craftsmen	19,006,745
VI. Golden furniture (<i>supellex</i>): vessels of every kind: various images of elephants, horses, camels, and similar animals, made of gold.	9,507,992

Carried forward 89,035,258

	Rupees.
<i>Brought forward</i>	89,035,258
VII. Wrought silver, such as goblets (<i>scypbi</i>), dishes (<i>disci</i>), candlesticks, columns, and other vases and utensils of every kind	2,225,838
VIII. Brazen (<i>anea</i>) vessels and furniture of every kind and fashion ("bronze and copper" in Manrique)	51,225
IX. Most elegant vessels of every kind in porcelain (Manrique adds <i>colorificos cristalllos</i> —"and coloured glass")	2,507,747
Total of above items	93,820,068
X. Cloths interwoven with gold and silver, from Persia, Turkey, Gujarāt, and Europe; also silks of various kinds; with cotton goods from Bengal and other provinces, estimated to be worth	15,509,979
XI. Woollen cloths, European, Persian, and Tartar	503,252
XII. Tents, hangings, umbrellas (<i>conopea</i> , see p. 141 of text), rugs, and all things needed for the adornment of houses or for camp use	9,925,545
XIII. Books, written by great men, and adorned with extremely valuable bindings (Manrique says, "mostly by very ancient and serious authors"); valued at	6,463,731
XIV. Engines of war (<i>tormenta bellica</i>), mortars (<i>bombardæ</i>), balls, and gunpowder—as well as other military material	8,575,971
XV. Weapons—shields, swords, daggers, bows, arrows, and the like	7,555,525
XVI. Harness, bits of gold and silver, and everything else pertaining to horse furniture	2,525,646
XVII. Housings decorated with gold and silver (<i>tunica equestres</i> ; "Mandelslo" renders "covering-clothes for horses and elephants"); cloaks of every kind, and royal arms (<i>arma regalia</i>)	5,000,000
Total of above items	56,059,649
Grand total, including coin	348,226,664½

(Manrique gives the total in both words and figures, omitting the fraction. De Laët adds many more particulars about the details, and gives weights in "batmans". A "batman" weighed $82\frac{1}{2}$ pounds English, p. 141. The word is Turki.)

All the three authors, De Laët, Manrique, and "Mandelslo", agree in stating that the manuscripts in the Agra Library numbered 24,000, and were estimated to be worth Rs. 6,463,731. This interesting fact was first brought to notice in my *History of Fine Art in India and Ceylon* (Oxford, 1911, p. 456). I then took the information from Manrique, and was not aware that De Laët and Mandelslo give exactly the same figures. The average valuation comes to nearly Rs. 270, or about £30 per volume, this high estimate being due to the employment of renowned calligraphists for the text, artists of the highest class for the illustrations, and skilled bookbinders using the most costly materials. If the rupee be taken at the lowest possible value, namely two shillings, as estimated by Hawkins, the average value of the individual manuscripts would be £27.¹

The total value of the coin and stores in the Agra Fort alone at Akbar's death may be taken as being from 35 to 40 millions sterling. The other six treasure-houses may have contained as much more, or even a greater amount, and taken together cannot well have contained less. The gross valuation, therefore, would be from 70 to 80 millions sterling.

¹ "Mandelslo" describes the books as manuscripts, but the Jesuit accounts indicate that a few volumes printed in Europe must have been included.

XIV

THE CREDIT DUE TO THE BOOK ENTITLED "THE VOYAGES AND TRAVELS OF J. ALBERT DE MANDELSLO INTO THE EAST INDIES"

BY VINCENT A. SMITH

SOME time ago when I bought for a good price a good copy of the 1669 edition of the English version of Mandelslo's *Travels*, my impression was that I had secured a rare book recording the experiences in India of a learned and observant traveller in the reign of Shāhjahān. In fact, I believed the current legend concerning the high value of Mandelslo's writings as given by Mr. Oaten, whose words may be quoted, so far as necessary—

"As a source of information on the political or social condition of the country, however, neither Methold nor Bruton can compare with Albert de Mandeslo [*sic*]. Murray truly says that he was one of the most active and intelligent travellers who have ever visited India. The editor of Harris's collection of travels says no less truly that he had 'all the qualities requisite in such a guide, Knowledge, Diligence, and Fidelity'. That these encomiums are justified a very slight acquaintance with his book is sufficient to show. Being a scholar and a gentleman, and one already equipped with a considerable amount of knowledge about India, he entered on his travels with a stock of information which was calculated to render his observations peculiarly intelligent."

Mr. Oaten then proceeds to summarize, not quite accurately, some of the incidents recorded in the book bearing Mandelslo's name. He goes on (p. 181) to say that "in Mandeslo's [*sic*] narrative there is an excellent account of the religious and social customs of the people, chiefly of those of Guzerat", and to quote from it. Mr. Oaten concludes his notice by pronouncing Mandelslo,

or Mandeslo as he calls him, to be "the chief" of "the earlier provincial travellers".¹

Now all the material statements made by Mr. Oaten in the passages above quoted, although made in perfect good faith, are actually untrue, that is to say, contrary to the fact.

The Appendix seems to indicate the source of Mr. Oaten's series of blunders by referring to "Harris, vol. i". Apparently, and naturally enough, Mr. Oaten, when writing his prize essay, was content to read the text of Mandelslo in the collections of Harris and Murray, without looking up the rare editions of the translation by John Davies, published in 1662 and 1669, or earlier German and French editions. If he had read the prefaces in any of those editions, especially in de Wicquefort's French version, he would have discovered at once that the praise lavished by Harris and Murray on Mandelslo was wholly unjustified. Harris does not say what text he used, but he seems to have made a loose translation himself either from the German or the French. He must have had in his hands the prefaces which quite frankly state the facts, so that his misstatements are inexcusable. His absurd eulogy goes farther even than the passages quoted by Mr. Oaten.

"I cannot but observe," he says, "with respect to this Detail of Facts, that he is of all writers, the most unsuspected, and therefore the most worthy of credit. An *English*, a *French*, or a *Dutch* Writer, can never divest himself entirely of the Prejudices imparted to him by his Country; but this Gentleman could have none of those Prejudices, and therefore we may safely rely upon what he says of any, or of all the Nations."

¹ *European Travellers in India during the Fifteenth, Sixteenth, and Seventeenth Centuries, etc.*, by E. T. Oaten (Kegan Paul, Trench, etc., 1909; being the Le Bas Prize Essay of 1908). Although Mr. Oaten had the bad luck to be misled about Mandelslo, his little book is a serviceable summary and quite good on the whole. It is now out of print.

Harris seems to have believed that Mandelslo himself made the inquiries on which the accounts of Gujarāt, Pegu, Siam, China, etc., are based.¹ In reality, Mandelslo was an imperfectly educated young man, and had no more to do with writing the much praised dissertations than I have had. Anybody looking through de Wicquefort's or John Davies's versions, including the prefaces, can satisfy himself in a few minutes of the utter falsity of the statements made by Harris and ingenuously copied by Mr. Oaten. But to explain the matter in print requires considerable space. Accident has forced me to take up the subject. When investigating the accounts of Akbar's treasure, it became my business to examine the value of each of the three European authorities who reproduce the inventory. One of the three being Mandelslo, or rather a writer posing as Mandelslo, I have been driven to hunt up many scarce old volumes in order to settle the question as to the credit due to the *Travels* published in the name of Mandelslo.

The demonstration of the truth of the matter involves the setting forth of numerous bibliographical details, and a brief summary of Mandelslo's life.

John Albert de Mandelslo, a young German gentleman of good family, entered the service of the Duke of Holstein as a page. When the Duke sent an embassy in 1635 to Russia and Persia for certain commercial purposes, young Mandelslo, who was then 20 years of age, obtained permission to join it as "a gentleman of the retinue", or as we should now say, an attaché. He shared the adventures of the ambassadors, but being desirous to visit India, left Ispahan on January 16, 1638, and proceeded to Surat, where he arrived on April 25.

¹ For "Harris", I have used *A Complete Collection of Voyages and Travels, etc.*, in two huge folio volumes, by John Harris, D.D., F.R.S., published by T. Osborne, etc., London, 1704. All Souls College, Oxford, possesses a fine copy of this edition. I have not thought it worth while to look up the reference to Murray.

In October of the same year he availed himself of an opportunity to go up country, and, travelling through Ahmadābād, came to Agra in November. His stay there being interrupted by meeting a Persian with whom he had a blood-feud, he travelled to Lahore, spent two or three days there, and returned with all possible haste to Surat. On January 1, 1639, he took ship from that port for England. On July 2 he reached Madagascar, where the ship was detained for six weeks, and on December 16 his voyage ended in the Downs off Dover. It thus appears that Mandelslo was only 20 years of age when he started, and 23 or 24 when his travels ended.

Adam Olearius, librarian and Court mathematician to the Duke, was secretary to the embassy, and composed a learned account of its doings and adventures, first published in German in 1646 or 1647. The book passing under the name of Mandelslo has always appeared in all its forms as a supplement to *The Travels of the Ambassadors* by the erudite Olearius, and has been bound up with those *Travels*. I have not seen the first German edition of the work of Olearius, but I have examined in the Bodleian the Dutch version of it, published at Utrecht in 1651. The book was translated from the German by D. V. Wageninge. It contains the original form of young Mandelslo's narrative, consisting of a letter sent by him from Madagascar to Olearius and a supplementary journal or log of his voyage thence to England. The letter occupies only 37 pages of the thick little volume, while the journal occupies only 8,—45 pages in all. The book is either duodecimo or very small octavo.

The second German edition of the work by Olearius, a copy of which is in the Bodleian, is a handsome thick folio with brass clasps, printed at the ducal press of Schleswig in 1656.¹ Olearius observes that the edition

¹ A sister-in-law of Mandelslo helped to defray the cost.

printed ten years earlier had gone out of print, and that large additions had been made to the new edition. The Mandelslo part has a separate title-page. In a long preface addressed to "the reader", Olearius refers to the letter from Madagascar and the supplementary journal or log of the voyage to England. The inventory of Akbar's treasure is *not* in this edition.

The French version, of which the first edition in two volumes quarto appeared in 1659, must have been based on the German edition of 1656. The translator, Monsieur A. de Wicquefort, had extremely liberal ideas concerning the privileges of a translator. He used the German original merely as a nucleus, round which he arranged his own compilations, making no secret of his procedure, but avowing it frankly. He availed himself of this liberty with special freedom in the case of Mandelslo.

"Le sieur de Mandelslo," he observes, "n'avait point d'estude, mais il sçavait assez de Latin, pour entendre ce qu'il lisoit . . . Et en effet ce qu'il en dit est assez maigre: mais Olearius, qui avait passion de faire vivre la memoire de son amy, y a voulu mettre la main, et luy a donné à peu près la forme, sur laquelle cette traduction a esté fait."

The second French edition of de Wicquefort's much-doctored book appeared in two volumes folio at Leyden (Leide) in 1719; and a third edition, "considerablement augmentez," also in folio, at Amsterdam in 1729.

John Davies, of Kidwelly, translated de Wicquefort's first edition into English. His English version, in folio, was first published in 1662. The second edition, in larger folio, "corrected," appeared in 1669. This second edition is the form in which Mandelslo's so-called *Travels* are most easily accessible complete. But the book is scarce. I have never heard of a copy of the 1662 edition for sale. I have, however, examined the Bodleian copy.

In order to prevent any possible misunderstanding or misrepresentation, it will be advisable to transcribe in

full what Davies says about Mandelslo in his 1669 edition. His remarks are in part freely translated from the French of de Wicquefort.

"MANDELSLO, a Gentleman well born, had his Education at the Duke of *Holstein's* Court, to whom he had been a Page. Hearing of an Embassy intended for *Muscovy* and *Persia*, he would needs be one in it : and as if he were that *Virtuous Man*, who looks upon the whole World as his Country, he would not depart, ere he had obtain'd his Prince's leave, to see the other parts of *Asia*. During his aboad at *Ispahan*, he got acquainted with some *English* Merchants, who, speaking to him of the *Indies*, rais'd in him a desire to go thither.

"The King of *Persia*, to engage his stay at his Court, proffers him a Pension of ten thousand Crowns ; he slights the favour of so great a Prince, gets on horse-back, with no great Sums about him, and sets forward on his Journey, with a retinue of three *German* servants, and one *Persian*, who was to be his Guide and Interpreter, but forsook him, when he stood in most need of his service and assistance.

"It was also a very strange Adventure, which made him find civil entertainment and hospitality at *Surat* ; made him subsist at the charge of others ; conducted him by Land to the Great *Mogul's* Court ; brought him safely back again to *Surat* : preserv'd the ship he was in after so many tempests near the Cape of *Good-Hope* ; and miraculously deliver'd him at his first arrival into *England*, when he was given over for irrecoverably lost in the very haven, as may be seen near the end of his Travels.

"To these Mandelslo had a particular inclination, and knew so well how to make his advantages thereof, that *Olearius* himself makes no difficulty to confess, that he met with, in his Notes, many things, which might have been added to his Relation, and have found a kind Reception even among the more Curious, had he been as forward to have his Travels publish'd, as he had been to prosecute them. But Mandelslo, instead of giving the world that satisfaction, and continuing with his Friend, who might have further'd him in his design, left the Court of *Holstein*, where he found not employment proportionable to his merit, and betaking himself to another

Profession, he got into a Regiment of Horse, commanded by a German, who purely by his Military accomplishments, had rais'd himself to one of the greatest dignities of *France*. He had therein the Command of a Troop, and being a person of much Courage, and endu'd with all the qualities requisite to the making up of a great man, was likely to have rais'd himself to a more than ordinary fortune, when coming to *Paris* to pass away the Winter, he there died, of the small Pox.

"Being at *Surat*, in December 1638, he made a kind of *Will*, concerning his Papers, which he put before the beginning of his Relation, wherein he desir'd his Friend *Olearius*, not to suffer it to be publish'd, in regard he had not had the leisure to digest it into order, or if he did, that he would rather regard therein his reputation after his death, than the friendship they had mutually promis'd one another, and faithfully improv'd, during the four years of their joynt-Travels.

"*Mandelslo* was no great Scholar, but could make a shift to understand a Latin Author, which helpt him much in the attaining of the *Turkish* Language, wherein he came to a considerable perfection. His Friend taught him also the use of the *Astrolabe*, so that he was able to take the Longitudes and Latitudes that are in several places of his Book, and without which it had been impossible for him, to be much skill'd in Geography, which makes the most considerable part of this kind of Relations.

"*Olearius* hath indeed been very much his Friend, not only in reforming and refining his Style, which could not be very elegant in a person of his Profession, but also in making several observations and additions thereto, printing it in *Folio*, in a very fair character, and adorning it with several pieces of Sculpture [*scil.* engravings].

"*Olearius's* kindness to his Friend, in enriching his Relation, with many excellent remarks, taken out of *Emanuel Osorio*, *Maffius*, and the chief Voyages of the *Dutch*, gave the *French* Translator thereof, *A. de Wicquefort*, occasion to augment the said Book with whatever he found excellent in all those, who have given the best account of the *East-Indies*.

"So that it is to him we are oblig'd for the exact description of the Province of *Guzuratta*, the Kingdoms of *Pegu*, and

Siam, &c., the state of the affairs of *Zeilon*, *Sumatra*, *Java*, the *Molucca's*, and *Japan*, as also for the Religions of these people. So that there is, in this Edition of ours, especially as to the Travels of *Mandelslo*, a third part more than there is in the largest of the *German* Editions."

The above perfectly candid account demonstrates that the greater portion of the work passing under the name of *Mandelslo* is merely a compilation made partly by *Olearius* and partly by *de Wicquefort*. *Mandelslo* himself had neither the knowledge nor the capacity to write the book which bears his name.

In *John Davies's* edition of 1669 the work entitled *Mandelslo's Travels into the Indies* is divided into three books, occupying 232 pages of folio text. Any ordinary reader, seeing the large space taken up with learned descriptions of *Pegu*, *Sumatra*, *Java*, *China*, *Japan*, &c., would suppose that *Mandelslo* had visited these countries. He was never near any of them or wrote a line concerning them. He simply went to *Surat*, made a rapid journey to *Agra* and *Lahore* and back to *Surat*, and thence to *England* by sea, calling at *Goa*. His slight travels in *India* have been much exaggerated. He did not go "with a friend on a visit to *Bijāpur*", as *Mr. Oaten* affirms that he did. Nor does he give a "good account" of *Lahore*. On the contrary, he observes that "I found not anything remarkable about *Lahor*, but one of the King's Gardens, which lies two dayes journey distant from it". The few lines which he devotes to the city do not contain anything worth remembering. He does not profess to have been present when the governor of *Ahmadābād* cruelly beheaded eight dancing girls because they delayed to obey his summons. The incident was witnessed by "the two principal Directors of the *English* and *Dutch* trade there", from whom apparently the young traveller heard the story, which *Mr. Oaten* treats as a personal experience of *Mandelslo*.

I have taken pains to examine the 1669 edition closely, and find that out of the 232 folio pages not more than 65 can be attributed to Mandelslo. In other words, more than two-thirds is padding compiled from other authors. The huge interpolations are of little historical value, because no references are given to the authorities used, and it is impossible to verify the compiler's statements. Pages 1-12 are mostly Mandelslo, but considerable erudite insertions may be ascribed to Olearius. The description of India in pp. 13-16 is also by Olearius, and I suspect that it was taken from Manrique's *Itinerario*, published at Rome in 1649. Pages 17-36 are mostly by Mandelslo, but interpolated to some extent.

The account of Akbar's treasure on pp. 37-8 is not in the second German edition, and seems to have been inserted by de Wicquefort, who took it probably from either De Laët (1631) or Manrique (1649). The account of Shāhjahān's army, etc. (pp. 38-41) was presumably taken from some book or other by either of the editors. Mandelslo does not seem to have had any knowledge of such things. Most of the subsequent matter to the end of p. 47 is by Mandelslo. De Wicquefort's account of Gujarāt begins on p. 48 and ends on p. 70. A few lines from Mandelslo's notes printed on p. 71 are continued on p. 78. The intervening learned pages seem to be by Olearius. Pages 78-86 are mostly Mandelslo, as is half of p. 87. Olearius then comes in, and Mandelslo resumes on p. 89 for a few lines. There is another little bit of Mandelslo's writing on p. 93, but the rest on to p. 195 is mainly de Wicquefort's. Mandelslo begins again on p. 196 (book iii), taking up his story from p. 93.

On p. 213 an editor, probably Olearius, comes in again, and goes on to the middle of p. 219, when we get an extract from Mandelslo's uninteresting diary. From p. 220 to the middle of p. 224 there is more interpolated

erudition, but on p. 224 the diary is resumed at the point where it had broken off on p. 219. The few pages remaining to the end at p. 232 may be entirely Mandelslo's.

The parts of the book written by Mandelslo are not only "*assez maigre*", as de Wicquefort observed, but almost valueless. They tell hardly anything of the slightest importance which is not better told by other travellers. The descriptions of places are vague and indefinite, and the diary when quoted verbally is usually not of the least interest. Mandelslo's "bubble reputation" is thus pricked beyond the possibility of repair. It would be difficult to find another example of a "faked" book enjoying for so long an unquestioned high estimation wholly undeserved.

XV

SUMERIAN AND GEORGIAN: A STUDY IN COMPARATIVE PHILOLOGY

By M. TSERETHELI

PART II

(Continued from 1914, p. 36.)

I. SUMERO-GEORGIAN PHONETICS

FOR two reasons we give here the elements of Sumerian and Georgian-Lazian-Mingrelian-Svanian sound-changes: (1) to show how far the sound-changes in Sumerian correspond to the sound-changes in Georgian and (2) to justify our comparisons of Sumerian and Georgian words, i.e. to show that those comparisons are phonetically not impossible.

But we do not pretend to formulate phonetic "laws" deduced rigorously from the comparison of Sumerian and Georgian words. Firstly, because we have no exact knowledge of Sumerian phonetics, and the subject of the comparative phonetics of Georgian, Mingrelo-Lazian, and Svanian is by no means exhausted. Secondly, because phonetic "laws" in general have very little similarity with mechanical or physical "laws", for the former are essentially empirical, and their reliability is limited to a certain degree by the supposition that the languages compared are undoubtedly related, this relation being already established by taking into consideration many other factors showing clearly their common origin. The phonetic laws deduced from the comparison of languages

supposed to be related may be exact, though inadequate to explain every particular phenomenon, and may lead to many new discoveries. But if we formulate phonetic laws for languages the relation of which is a *problem* to be solved, and then try to solve this same problem by ascribing an absolute certitude and truth to our "laws" deduced from the comparison of quite uncertain facts, certainly we may be involved in a sort of *petitio principii*, and all our deductions may be entirely wrong. Indeed, we proceed in such cases in the most illogical way: we say that the words of some compared languages are related, because the sound-correspondence and the sound-changes in them are characterized by a certain regularity, but at the same time we forget very often that this "regularity" is deduced from the comparisons and identifications of the words of such languages the relation of which is not at all suggested by other indices, and the identification of the words being erroneous the phonetic "laws" based upon it must be necessarily erroneous and artificial. When we have no other proofs but such "laws" to establish the genetic relation between two or more languages, we are almost always involved in such a contradiction, and our intuition rather than our method may lead us to the discovery of a truth in a few cases. The history of the comparison of different languages illustrates only too clearly our opinion. Without a preliminary conviction and knowledge that all Germanic languages are related, without a great number of indications showing their common origin, the philologist would never have been able to formulate the laws of their comparative phonetics with such a degree of exactitude and certainty as at present. The same may be said with still more certitude for the Semitic languages. This is the cause of the extreme fragility of all well-known theories seeking to establish the relation of Sumerian with many linguistic groups. Such is the fate of the

theory of A. Trombetti, whose ambition is to establish the linguistic unity of all the languages of the world, and such is also the fate of the theory of Professor N. Marr, who tries to prove the existence of the genetic relation between Georgian and Semitic. In all those cases neither the comparisons and identifications of the words nor the phonetic laws are true in the majority of cases, the other evidence alleged to establish the common origin of the compared languages being absolutely insufficient.

That is the reason why we cannot pretend to ascribe to the following Sumero-Georgian sound-correspondences and sound-changes the character of *phonetic laws*. Supposing that Sumerian words are really identical with the corresponding Georgian words, what may be the character of Sumero-Georgian phonetics? This I should like to show by the phonetic "laws" formulated below, and whether the grammatical comparisons discussed in Part I of this work, which I consider as an *index* of the genetic relation between Sumerian and Georgian, do not exclude the possibility of identification of the words upon which these phonetic "laws" are based—the reader can judge for himself.

Another difficulty renders still more uncertain the result of our task: the number of Sumerian words which may be identified with Georgian words is not more than about two hundred, and thus we are obliged to base our conclusions upon the comparison of these few Sumerian and Georgian examples. In addition to all other difficulties, the field of our observation is very restricted, and therefore we offer here merely an attempt at Sumero-Georgian phonetics with the reserve above-mentioned.

A. *The sound-correspondence in Sumerian and Georgian, the compared words supposed to be identical.*

1. Sum. *b* || Georg. *b*, *v*, *φ*.

bara = negative particle = Georg. *ver(a)*, Min. *var* = not.

bar = shine = Georg. *var-var-i* = to be brilliant (Sum. *babbar* = sun).

bil = burn = Georg. *bil-bil-i* > *bir-bili* = the burning of the fire.

bir = shine = *bri-al-i* = to shine.

bal = to dig = *φl-va* = to bury.

bad > *pad* = to swear = *φiθ-i* = to swear.

bar = to shine = *φer-i* = the colour.

bar = side = *φar-di* = apportion, *φer-di* = side, flank, rib.
(N.B.—*φer-di* > *gver-di* = Min. *gver-di*. *φ* || *g*; an analogous phenomenon in Georg.-Min.: *bud-e* = Min. *o-gvad-e* = nest: *b* || *g*.)

2. Sum. *d* || Georg. *d*, *t*, *θ*; *θ* (Min. > *θ*); *i*, *t*.

pad = to swear = *φiθ-i*, Min. *φuθ-i* = to swear.

pad = break into bits = *φ(l)εθ-va* = break into bits.

dar = turn, twist, variegated, etc. = *tri-al-i* = to turn;
also *tr-e* = circumference, circle; perhaps also
tr-el-i = variegated.

κud = *κveθ-a* = to cut.

κveθ-a = to cut.

κul-va = to cut into pieces.

κul-va = to cut out (something from the centre of an object).

κod-va = to cut, to wound, etc.

In these *κud*-words all those *κ* + *d*, *θ*, *t*, *t*, *θ*, express only different shades of meaning of some primitive Georgian **κud* > **κod* = to cut. I think that the phonetic values of the sign *κ*, *κud*, *κul*, *κud*, *κul*, *κut*, etc., expressed in Sumerian also different shades of meaning of some original *κud* = to cut.

3. Sum. *d* || Georg. *d*, *ḏ* (Min. *d*).

kid = to seize = *kid-e*_{ba} = to touch, to seize.

gid = side = *kid-e* = side, bank, shore.

gid = long = Georg. *g(r)ḏ-el-i* = Laz. *gu(n)ḏ-e* (**gu(n)-d-e*) = long.

adda = father = Georg. *deda* = mother; *si-ḏe* (Min *si(n)ḏa*) = son-in-law (see vocabulary).

dā = make, do, construct, build, etc. = Georg. root *dv* > *ḏv* = set up, put, place (*eplēu*).

du, *dumu* = son = *ḏe*, root *ḏb* (?) (see vocabulary).

dug = good = Georg. *dob* = better; Min. *ḏg-ir-i* = good.

dug = knee = Georg. *θoq* = to kneel = Sv. *θveq* = knee.

4. Sum. *d* || *d*, *t*, *θ*, *i*, etc., in *dg*, *dib* < *dig*, *dug* words (*dg* > *db* = *tκ*, *tḫ*, *tḫ*, *θq*).

dig > *dib* = seize, afflict = Georg. *tκe-na* = to cause pain.

tḫe-na = to afflict.

tḫv-e = the prisoner,

from *tḫven-va* = to seize.

dug = to speak = *θq-ma* = to say; *si-tḫv-a* = the word; also *θḡ(r)-oba(θḡ!)* = to say, to relate.

dug = meditate =

Georg. *tκu-a* = understanding, intelligence.

Sv. *tḫ-κva-ri* = to think.

Laz. *tv* = to say.

Georg. *u-tḫ-eba* = to know.

Sv. *tḫel* = intelligence, wit.

Min. *θq*. = to know, etc.

We observe here another wonderful phenomenon in Georgian: the roots *tκ*, *tḫ*, *tḫ*, in the series *dig* > *dib* = to seize, to afflict, and the roots *θq*, *tḫ*, *θḡ*, and perhaps also *tḫ*, *tκ*, *θq*, in the series of *dug* = to speak, to meditate, express but different shades of meaning of some primitive Sum. *dg* = to seize, and *dg* = to speak, to utter.

5. Sum. *g* || Georg. *q̇*.

gal = to be = *sa-q̇l-i* = the house (anything destined to live in).

(Also *ga* = the house = *sa-q̇l-i* = the house.)

gaz = to slay, to destroy = *q̇oθ-va* = to slay, to destroy.

giš = Georg. *q̇e* (**geš*, see vocabulary) = the tree.

gi = be new, new = Georg. *a-q̇al-i* or *a-q̇-al-i* = Sv. *ma-q̇-e* = new.

gar = make = Georg. *q̇ur* = make = Sv. *ker* = make, etc.

6. Sum. *g* || Georg. *ǵ*.

gam = to prostrate, bow down (> *gur*, see Fossey,

Hilpr. Ann. Vol.) = Georg. *ǵun-va* = bow down;

Laz. *ǵul* = bow down; also Sum. *gur* = Georg.

q̇r-a = bow down.

gi = take away, remove = *ǵ* (*a-ǵ-eba*, *ia-ǵ-eba*) = remove, take.

gun = mighty, great = Georg. *ǵon-e* = might, force.

7. Sum. *g* || Georg. *κ*.

gal = exist, be = Georg. *κl-e* = penis; perhaps connected with Sum. *kal-la* = pudenda.

gana = field = Georg. *κana* = field.

gar = make = Sv. *ker* (Georg. *q̇ur*.) = make.

gāl = destroy, slay = Min. *κvil-ua* (Georg. *κl-va*) = destroy, slay.

gir = to assemble = Georg. *κe-κr-a* = to assemble.

giš = understanding = Georg. *κur-i* = ear, (see vocabulary), etc.

8. Sum. *g* || Georg. *κ*.

giš = to beget, male = Georg. *kaθ-i* = man.

gir = to bind = Georg. *κr-va* = to bind.

gid (κud) = to cut = Georg. *κod-va* = to cut.

gāl = destroy, slay = Georg. *κl-va* = destroy, slay.

9. Sum. *g* || Georg. *q̇*.

gim = Georg. *qm-na* = to beget, to make.

gin = Georg. land, earth = *q̇ve* = beneath, on the earth; Sv. *gim* = earth.

qu = voice, speech = Georg. (*r*)*qu* = to utter, to say, to name.

gud = neck = Georg. *qed-i* = the neck.

gal = have = Georg. *qon* = have; Min. *ḡun* = have; also Georg. *ḡvan* = to have (anything living).

10. Sum. *g* || Georg. *ḡ*, *ḡ*.

gid = long = Sv. *ḡod-i*,

giš = tree, wood = Min. *da*, Georg. *de-li* (see **ḡeš*) = tree, wood.

gar = food = Sv. *d̄yar* = Laz. *d̄ar* = bread.

11. *ḡ* || *ḡ*.

ḡab = Laz. *ḡav-i* = bad.

ḡar = Georg. *ḡar-i* = ox.

ḡaš = Georg. *ḡoḡ-va* = to slay.

ḡul = be joyful = Georg. *ḡal-isi* = joy.

ḡul = evil = Sv. *ḡula* = bad, evil.

ḡa = abundance, much = Georg. *ḡv-av-i* (or *ḡva-vi*?) = the heap, *u-ḡv-i* = abundant.

12. Sum. *ḡ* || Georg. *ḡ*.

ḡad = bright = Georg. *ḡad-ḡad-i* = to shine.

ḡar, *ḡir* = design, plan = Laz. *ḡar* = to draw lines (see vocabulary).

ḡiš = be red = Georg. *ḡaj-ḡaj-i* = to shine.

ḡaš = axe = Laz. *ḡaz* = to smooth with an axe, to polish (?) (see vocabulary).

13. Sum. *κ*, *κ* || Georg. *κ*, *q*.

ka = mouth = Georg. (*r*)*qu* = to speak, to name.

ka = (*kan*?) = Georg. *kar-i* = door.

κil = maiden = Georg. *qal-i* = woman, maiden.

κalla = pudendum feminæ = Georg. *qal-i* = woman.

κum = grind = Georg. *qb-va* = to grind.

14. Sum. *κ* || Georg. *g*; also *ḡ* and perhaps *ḡ* (?).

κoš = route, run = Georg. *gz-a* = road; *qḡ* = run (*gz* > *qḡ*).

κiš = hog = Georg. *goḡ-i* = hog; *ḡor-i* = swine.

kur = mountain = Georg. *gor-a* = hill, mountain.

kur = glow, burn = Georg. *qur-eba* = to heat (?);
perhaps connected with Sv. *mu-qur-e* = glitter,
lustre.

15. Sum. *m* || Georg. *n*.

eme, me = Georg. *ena* = tongue (only one example).

16. Sum. *p* || Georg. *m* (?).

pap = male, father = Georg. *mama* = father.

17. Sum. *p* || Georg. *φ*.

par = spread = Georg. *φar* = to cover, spread.

peš = abundant = Min. *φš* (Georg. *vs*) = full, abundant.

peš = inward parts = Georg. *φaš-i* = inward parts.

peš = to breathe life = Georg. *φš(v)* = to breathe.

18. Sum. *s, š* || Georg. *θ* (Min. *θ*); *i, t*.

giš = male = Georg. *kaθ-i* (Min. *koθ-i*) = man.

kešda = to bind = Georg. *kiθ-va* = to bind.

gaš = to slay = Georg. *qoθ-va* = to slay.

šal = woman = Georg. *θol-i* (Laz. *θil-i*) = the wife.

sil = sever, cut, split = Georg. *θl-a* = to separate; *tval*
= to separate; *til-i* = the part.

sur = to be poured out, rain = *tur-va* = drawing out
the liquid; *tur-tur-i* = pouring out (said of blood,
sweat, water).

šar = to write = Georg. *ter-a* (Min. *tar-ua*) = to write.

šir = reduce to extremities, bind = Georg. *tir-va* = to
catch, to bind; *tir-i* = affliction, misery, plague.

19. Sum. *s, š* || Georg. *s, š*; *z, j*.

sun, šun = be clean, shine = Georg. *šven* = beauty.

sir, šir = shine = Georg. *m-ze*, Min. *b-ja*, Sv. *mu-j*
= sun.

šar = totality = Georg. *sul* = totality, all.

20. Sum. *š* || Georg. *r*; Min. *ḡ*.

kiš = hog = Georg. *ḡor-i* = swine; Min. *ḡed-i*, also
Georg. *ḡof-i* = hog.

guš-kin = gold = Georg. *ogro* = Sv. *vorgo* = gold.

giš = hear = Georg. *kur-i* = Min. *kudi* = ear.

giš = male = E.S. Sum. *muš* = Georg. *vaj-i* = son, but with *vaj-i* is related Georg. *kver-i* = Min. *kvad-i* = testicle.

21. Sum. *s* + *g*, *š* + *g* in *sig*-words and *sag*-words, etc., and Georgian corresponding sounds.

(a) Sum. *s(š)g* || Georg. *sq*, *sq* (*θq*; *θκ* > *θκ*).

sig = be bright = Georg. *sq-vi-i* = the ray.

šeg = rain, to water = Georg. *sq-ma* = to pour out; *θq-eva* = to pour out.

še(g) = fat = Georg. *sqvi-li* = thick; *sug-an-i* = fat; *sq-el-i* = thick.

sixxa = goat = Georg. *θix-an-i* = a kid; *θq-a* = goat; also Georg. *θix-an-i* = a kid.

sag = head, face = Georg. *saj-e* = face; *θqe-mi* = head; *sqe-ul-i* = body, etc.

(b) Sum. *s(š)g* || Georg. *θq* (Min. *θq*, *dq*); *dj*; *θ* + *q* (*t*); *ik*, *ik*, etc.

sag = head, face = Georg. *θiq-e* = a fortress (built on the top of a hill); Min. *dq-a*; Georg. *θqvi-ri* = nose; Min. *θqvin-di* = nose.

saj = to burn = Georg. *θe-θq-li* = fire; Min. *da-θq-i-ri* = fire; *θq-el-i* = hot.

sag = head = *dj-ol-a* = to lead.

sig = to give, or perhaps *sug* = to bear interest (?) = Georg. *zqve-va* = to pay; *zqve-ni* > *djve-ni* = the gift, present.

sig > *zem* = to give = Georg. *θ(m)* > Min. *θ(m)*, = to give; also Georg. *θuq* = to give a gift.

šeg = rain, to water = *ik-al-i* = water; *ivi-ma* (Min. *tu-ma*) = the rain, just as Georg. *θq* > Min. *θq* = burning, fire, hot, corresponds to Georg. root *iv* = to burn; Min. *tu* = to burn.

sig = be bright = Georg. *b(r)-ik-ena* = be bright; also *b(r)ikvi-al-i* = to shine.

šag = be sound, pure = Georg. *tmi-da* = pure, holy ;
Sv. *ikili-an*¹ = holy.

šug = water-basin = Georg. *šgv-a* = the sea ; Sv. *duš-va*
= the sea, etc.

22. Sum. *z* || *š*, *ḡ* ; also *z*.

zag = side, boundary = Georg. *šgv-a-ri* = boundary ;
šgu-de = walls, enclosure ; Min. *ḡga* = side.

zag = right hand = Georg. *ma(r)-ḡv-ena* = right hand ;
Min. *ma(r)-ḡgv-ani* = right hand.

23. Sum. *z* || Georg. *ḡ*, *i* (*z*).

zig = rush > *sig* = rush = Georg. *ie-va* = to advance,
etc. (see vocabulary) ; *iv-eri* = point.

zig = principle of life = Georg. *ḡgov-el-i* = animal ;
ḡo-ḡḡ-al-i = living.

zu = know = *ḡ* (Min. *ḡq*) = know ; Georg. *v-u-ik-i* =
I know.

zur = prayer = *iv-va* = to pray, to sacrifice ; Sv.
li-m-zur-i = to pray.

Here it must be noticed that in those Georgian *sig*- and *zig*-words (as in *dug*-words) (1) the related groups of consonants *šḡ* > *ḡḡ*, *ḡḡ* > *ḡḡ*, *ḡḡ* > *ḡḡ*, *šḡ* > *ḡḡ*, *ḡ(v)* > *ḡḡ*, *ik* > *ik*, etc., form the roots expressing different shades of the meanings of some primitive words difficult to reconstruct, and that (2) on the other hand, in many cases, almost identical roots express entirely different ideas, so that we can form from the above-mentioned phonetically similar roots some particular series with perfectly independent senses—

(a) *šḡ* > *ḡḡ*, *ik* = Sum. *šeg* = the idea of liquidity and of movement of a liquid.

(b) *ḡḡ* > *ḡḡ* (> *šḡ*), *ḡ(v)* > *ḡ(u)* = Sum. *saḡ* = the idea of heat and of burning.

¹ The root of this word is *ik* and the ending *an* or *ian* is not difficult to explain. But what is *-il-* (?) . Perhaps it is equivalent to the Georgian *il-i* (?).

- (c) $s\acute{q} > \theta\acute{q}$, $\theta\acute{q} > d\acute{q}$, $\acute{d}\acute{q}$, $i(v)$ = Sum. *sag*, *sig*, *zig* = the idea of prominence, height, and rushing forward.
 (d) $s\acute{q}$, $i\acute{k} > t\acute{k}$ (perhaps also $\acute{s}q$) = Sum. *sig* = the idea of light and shining. Perhaps this series is connected with the series (b).
 (e) $\theta\acute{q} > \theta\acute{q}$ = Sum. *zig* = the idea of life.
 (f) $\theta + ? > \theta + ?$, $\acute{d}\acute{g}$, $z\acute{g}$ = Sum. *si(g)* = the idea of giving, etc.

24. Sum. *t* || Georg. *t*.

- tab* = twin = Georg. *təub-i*; Laz. *tub-i* = twin.
tag = split, smash = Georg. *teq-va* = break up.
tal = twin = Georg. *tol-i* = equal, twin.
til = wailing = Georg. *tir-il-i* = to weep, wailing.

25. Sum. *t* || Georg. $\theta (> \acute{\theta})$.

- tab* = blaze, burn = Georg. *θb-il-i* = hot, warm.
tag = tremble = Georg. *θaq-θaq-i* ($> \acute{\theta}aq-\acute{\theta}aq-i$) = tremble with fear.
til = complete = Georg. *m-θel-i* = complete, entire.
tun = cavity, hole (*dun*) = *qo-θan-i* = pot (see vocabulary).
itu = month = Georg. *θθve* = month (reduplicated root?); also *θve* = month.

26. Sum. *t* || Georg. *t*, *t*.

- tar* = Georg. *tr-a* = to cut.
tur = small, little = Georg. *tul-i* = progeniture, child = Laz. *tul-u* = small, little.

27. Sum. *t* || Georg. \acute{d} .

- tur* = enter = Georg. root *dr* = idea of movement.
tin = be powerful = Georg. root *dl* = idea of power, force.

As to the vowels, some interesting phonetic phenomena are to be noticed.

(1) Instead of the vowel enclosed between two consonants in Sumerian, in Georgian we very often find this vowel at the end of the same biconsonantal root.

dug = to say = Georg. *tku* (*si-tkv-a*) = to say.

θqu (*θqv-a* = he said) = to say.

dig = to seize = Georg. *tku* (*tkv-e* = prisoner) = to seize.

sug = water basin = Georg. *zfu* (*zgv-a*) = sea, etc.

(2) This vowel may also entirely disappear from the root.

saġ = burn = Georg. *θe-θq-li* = fire.

seg = rain = Georg. *tk-al-i* = water.

sig = to give = Georg. *θ* (*mi-s-θ-a*, he has given) = to give.

gal = to exist = Georg. *sa-ql-i* = house, etc.

(3) Sum. *u* || Georg. *o*, *va*, *ve*, *vi*.

xud = Georg. *xveθ*, *xvaθ* = to cut; *xod* = to cut.

muš = *uš* = Georg. *vaj-i* = male (Georg. son).

ušum = Georg. *vešap-i* = dragon.

uz = she-goat = Georg. *vaθ-i* = goat, he-goat (?).

ud-da = when, if = Georg. *od-es* = when.

udun = oven = Georg. *θon-e* = oven (for baking bread).

unu = abode = Georg. *van-i* = abode.

uzu = flesh = Georg. *qo(τ)θ-i* = flesh.

muš = serpent = Sv. *vid* = serpent.

B. The parallel sound-changes in Sumerian and Georgian.

1. Sum. dentals change to sibilants.

dug > *zib* (*d* > *z*) = good.

unir > *ašer* (*n* > *š*) = sighing.

muten > *mušen* (*t* > *š*) = bird, etc.

Georg. dentals change to sibilants.

Laz. *diθqiri* = Georg. *sisqli* (*d* > *s*) = blood.

= Sv. *ziskv* (*d* > *z*) = blood.

Min. *oqori* > **doqori* > **soqori* > Sv. *šaqv* > Georg. *saqli* (*d* > *š* > *s*) = house, etc.

In Georgian the same change of dentals to corresponding affricatives composed of dentals and sibilants takes place.

Georg. *bude* = Min. *ogvade* ($d > \check{d} = d > d + j$) = nest.

Georg. *devs* > *ǰevs* ($d > \check{d} = d > d + z$) = it is resting.

Georg. *tantali* > *tanǰali* ($t > \check{t} = t > t + s$) = to prowl about; also *dandali* ($t > \check{d} = t > d + z$) = to prowl about.

Georg. *θixani* > *θixani* ($\theta > \check{\theta} = \theta > \theta + s$) = a kid of a goat.

Laz. *dǰa* > *θǰa* ($d > \theta = d > \theta + s$) = the day, etc.

These affricatives change reciprocally.

Georg. *titili* > *tuǰuli* ($t > \check{t}$) = chicken.

Georg. *kaθi* = Laz.-Min. *koθi* ($\check{\theta} > \theta$) = man.

Georg. *ǰu* = Min. *du(a)* ($\check{d} > d$) = female.

Sibilants change to affricatives.

Georg. *skinli* = Laz. *txinli* ($s > \check{t}$) = excrement of a bird.

Georg. *ǰaǰo* > *ǰaǰo* ($j > \check{t}$) = a kind of bird.

Georg. *zroǰa* > *ǰroǰa* ($z > \check{d}$) = the cow.

Laz. *ǰos* > *ǰoz* ($s > \check{\theta}$) = to slay.

Min. *txad* > Sv. *ǰad* ($t > \check{s}$) = to forge.

Georg. *ǰapuni* = Min. *θǰapuni* ($\check{s} > \theta$) = the sound of raining.

Georg. *ǰangi* > *ǰangi* ($j > \check{d}$) = the rust.

Affricatives change to sibilants.

Georg. *θǰvari* = Min. *ǰuri* ($\check{\theta} > \check{s}$) = sheep.

Georg. *mutuki* = Min. *bzuki* ($\check{t} > z$) = ulcer.

Georg. *stavla* > *stavla* ($\check{t} > t$) = to learn, etc.

Sibilants change to dentals.

Georg. *ǰiveli* > *titveli* ($\check{s} > t$) = naked; frequently met with. Also the change of sibilants to sibilants and dentals to dentals is so common that there is no need to quote examples.

2. Sum. velars to sibilants.

xi-en-gin > *xengir* > *ǰemir* > *ǰumer*.

Georg.: For this sound-change $\kappa > \delta$ we have an analogy in the Laz. sound-change $\kappa > \ell = \kappa > t + \delta$, since $\delta > \ell$ (see a bow); Laz. $\theta\kappa i > \theta\ell i$ = rope, *laxi* > *la\ell i* = dog; also Georg. *xideba* > *\ell ideba* = to touch, to seize.

3. Sum. velars to palatal-nasal.

digir > *dingir* = god.

\kappa anaga > **\kappa ana\eta a* > *\kappa alama* = land.

Georg.: The nasalization of *i*, *a*, etc., before *d*, *g*, etc.

agre > *angre* = so.

aguri > *anguri* = brick (an Assyrian loan-word).

\imida > *\iminda* = holy, pure, etc.

4. Sum. labialization: $g > m(w)$; $g > b$.

gir > *mir* = foot.

gal > *mal* = exist.

sig > *sim* > *sem* = to give.

\\$ag > *\\$ab* = heart.

ta\j > *tab* = to increase.

tug > *tub* = to repose, etc.

Georg. *bude* = Min. *o-grad-e*.

Georg. *\dot{d}ob* = better = Min. *\dot{d}g(iri)* = good.

I think also that the roots

Georg. *tu* > Min. *tu* = burn,

Georg. *\theta(m)* > Min. *\theta(m)* = give,

Georg. *\im(i(n)da)* = holy, pure,

Georg. *\im(-eva)* = to invite, to call (anybody to come), etc.,

are derived from some complete primitive roots, **ik*, **\theta q*, etc.

5. Sum. $n > m$.

erin > *erim* = soldier.

Georg. *ne\phi e* > *me\phi e* = king.

Georg. *xudiani* > Min. *xudelami* = with a tail.

Georg. *\dot{d}alian* > Min. *\dot{d}alam* = very (a common phenomenon in Georgian; also $m > n$).

6. Sum. $r > l$.

tur > tul = little.

ur > ul = a demonstrative pronoun.

Georg. *gare* > Min. *gale* = outside.

Georg. *tiriḫi* > *tiliḫi* = willow-tree.

Georg. *suli* > Min. *suri* = soul, etc.

7. Sum. $n > l$; $l > n$.

kanaga > *kalama*.

angub > *algub*.

Georg. *niṣani* > Sv. *lišani* = sign.

nitra > *litra* = the jug.

nemsi > *leḫsi* = needle, etc.

8. Sum. $r > s$; $r > š$.

dur > *tuš* = to sit.

ur > *uš* = to place.

er > *eš* = to weep.

Georg. *erḫi* < **esḫi* < **ešḫi* = one.

Georg. *rduli* < *sduli* < *šduli* = religion, law.

Georg. *kveri* = Min. *kvadi* ($r > d + j$) = testicle.

Georg. *kuri* = Min. *kuḫi* ($r > d + j$) = ear.

Georg. *kveri* = Sv. *švaj* ($r > j$) = a quail.

Georg. *rḫveli* < *sḫveli* = vintage, etc.

9. Sum. $n > r$.

uruk > *unuk* = Erech.

kengin > *kengir* = Sumer.

dul > *dun* = swamp.

Georg. *ḫeḫri* > Sv. *ḫeḫn* = white.

Georg. *qari* > Sv. *qan* = ox.

Georg. *kurti* > *kuntli* = eye (of a needle), etc.

10. Sum. $d > l$.

dib > *lib* = *šutuḫu*.

Georg., Min., Laz., Sv. prefixes: Georg. *sa* > Min.-Laz.

do > (*o*) > Sv. *le*, *la* (see grammar).

11. Sum. *b* > *m*.
dib > *dīm* = sandal.
 Georg. *qalamani* > *qalabani* = a bast shoe.
 Georg. *mama* > Min. *baba* = father.
 Laz. the verbal prefix for the 1st pers. sing.:
b > *v* > *m*, etc.
12. Sum. *g* > *d*; *ḡ* > *d*.
agar > *adar* = field.
gim > *dīm* = make.
igi > *ide* = eye; also *mug* > *mud* = to bear.
 Georg. *g* > *d*; *g* > *d*.
 Laz. *gyari* > *dari* = Sv. *diar* = bread.
 Georg. *giorgi* = Sv. *dyrag* (*g* > *d* + *j*) = George.
 Sv. *kolti* > **gurti* > *durbi* = heap.
13. Sum. *g* > *κ*; *z* > *s*; *b* > *p* (fortis for lenis).
kā-am-ni-gul-e > *ga(* > *ga*)-*am-ni-gul-e*.
azag > Assy. *asakku*.
zabar > Assy. *siparru* (*z* > *s*; *b* > *p*).
é-gul > Assy. *ekallu*.
 Georg. *g* > *κ*; *z* > *s*; *b* > *p*.
 Laz. *galaši* > *kalaši* = a storm.
 Georg. *batoni* > Min. *pateni* = a lord.
 Georg. *zeavi* > Min. *svimoni* = glut.
14. Sum. *s* > *š*; *š* > *z* (lenis for fortis). Georg. *s* > *š*; *š* > *z*.
 Georg. *šduli* > *šduli* = religion, law.
 Georg. *nestari* > *neštari* = a needle.
 Georg. *šašvi* = Min. *zesqvi* = blackbird, etc.
15. Sum. vowel harmony: Among many examples, *du* =
da and *ḡu* = *ḡe*, in *mu-un-du-tur-tur-ne* (*du* for *du*),
ḡu-mu-na-dū (*ḡu* for *ḡe*).
 Georg.-Min. *qi-vkide* instead of *go- . . .* = I was (see
 grammar).
16. Sum. dropping of final consonants.
si(g) > *si* = to give.
gi(n) > *gi* = be faithful.

m-u(n) > mu = to burn, etc.

Georg.-Min. *ša(q) > ša* = a postposition (see grammar).

Min. *ša(q) > ša* = time (once, twice, etc.).

Georg. *šig* = Min. *ša(q) > ši* = in, into.

Georg. *ti(+*γ)-n* = before; Sum. *si(g)* = rush forward.

Georg. *qu-e (*qun ?)* = below; Sum. *ki(n)* = earth.

Georg. *sisqli* = Sv. *sisqv > sisq* = blood (frequent).

17. Sum. dropping of consonants at the beginning of a word.

gur > ūr = *tertu*.

κūr > ūr = *kapāru*.

mul > ul = *κακxahu*.

giš > iš = *izu*.

muš > uš = sixty, etc.

Georg. (not very frequent).

Laz. *κudi > udi* = ear (Georg. *κuri*).

Laz. *κurdeni > urdeni* = grapes (Georg. *κurdeni*), etc.

C. Other phonetic phenomena in Georgian, Lazian, Mingrelian, and Svanian. (Only the most important are given.)

1. Georg. *s > h*; *s > n*.

The objective infixes of the verb: 1st pers. *v-h > v-s*;

2nd pers. *h > -s*; 3rd pers. *h-s > s-s*.

The subjective suffix 3rd pers. plur. of the verb.
en/an > es.

2. Georg. *r > Min. d*; Georg. *θqvirī* = Min. *θqvīndi* = nose.

3. Georg. *l > Min. š*; Georg. *dveli* = Min.-Laz. *dvesi* = old.

4. Georg. *l > Sv. š*; Georg. *tīli* = Sv. *tiš* = louse.

5. Georg. *q > Min. φ*; Georg. *qureba* = Min. *φuraφa* = to heat.

6. Georg. *p > Min. b > g*; Georg. *parpaši* = Min. *barbandi > gargandi*.

7. Min. *r* > Laz. *q*; Min. *morθi* = Laz. *moqθi* = come!
 I think that those *r*, *q* go back to *s* > *š*: Haldian
ustabi > *uštabi* (= **urθabi* ?); the root *st* > *št* and its
 meaning seem to be the same as Min.-Laz. *rθ* and
qθ, also Georg. *rθ*!

8. Georg. *s*, *š*, etc. > Min.-Laz. *sq*, *šq*, etc.

Georg. *s* > Min. *sq*: *dasoba* = *gešqumala* = to fix.

" *š* > " *sq*: *šoba* = *squala* = to bear.

" *š* > " *šq*: *šua* (> *šva*) = *šqa* = middle.

" *š* > " *θq*: *laši* = *lerθqi* = the lip.

" *θ* > " *θq*: *gaθena* = *gorθqina* = to create.

" *θ* > " *θq*: *θodna* = *rθqina* = to know.

" *t* > " *tκ*: *tīli* = *tκiri* = the part.

" *t* > " *tκ*: *tīra* = *tκirua* = to cut.

" *d* > " *dq*: *mardvena* = *mardqvani* = the right
 hand, etc.

9. Georg.-Sv.

Georg. *kd* > Sv. *hd*: *kidva* = *li-hdi* = to buy.

Georg. *l* > Sv. *κ*: *natili* = *naκvili* = the part.

Georg. *lv* > Sv. *hv*: *leva* = *li-hvi* > *li-hi* = to draw.

Min. *θ* > Sv. *šd*: Min. *θuθa* = Sv. *došd* = the moon, the
 month.

Georg. *θ* > Sv. *šd*: Georg. *aθi* = Sv. *iesd* = ten.

Georg. *θ/θ* > Sv. *q/q* > *q*: *uθbad* = *uqbad* = suddenly.

Georg. *s* > Sv. *q*: *suli* = *qvin* = soul.

Georg. *q* > Sv. *θ*: *qu(e)* = *θu* = below, beneath, etc.

10. Vowels.

Georg. *a* > Min. *i*: *anli* = *inθiri* = elder-tree.

" *a* > " *u*: *bali* = *buli* = cherry.

" *e* > " *i*: *kedeli* = *kidala* = the wall.

" *e* > " *u*: *berli* = *burθi* = sterile.

" *i* > " *e*: *miθema* = *meθama* = to give.

" *o* > " *i*: *qori* = *qiri* = vulture.

" *a* > " *o*: *kaθi* = *koθi* = man.

etc., etc., i.e. all possible changes between *a, e, i, o, u*. Then Georg. *o* > *va*, also Laz. *o* > Georg. *va*: *θoli* > *θvali* = eye, etc.; *u* > *ve*: *alkuri* > *alkveri* = the name of a city; Georg. *u* > Sv. *yu*: *buši* = *byušv* = a bastard; Georg. *o* > Sv. *ve*: *sadgomi* = *sadyvem* = a chamber; Georg. *u* > Sv. *vi*: *rduli* = *rdvili* = religion, law, etc. It is interesting to remember also that very often, when in a Georgian word the middle vowel is lacking, in Mingrelian and Lazian it is represented: Georg. *θma* = Min. *θoma* = hair; Georg. *κlde* = Min. *κirde* = rock, cliff, etc.

It is true that those vowel-changes in Georgian have no resemblance with that most interesting phenomenon in Sumerian roots by which the two consonants give to the word its general fixity of meaning, and the internal vowel adds a modal significance (Langdon): *gir* = to outline, *gar* = plan, *gur* = design (root *g* + *r*), etc. But perhaps they may correspond in some degree to the sound-changes of Sumerian vowels in so-called *EME-KU* and *EME-SAL*? *EK giš* > *ES muš*, *EK anir* > *ES ašer*, etc.

The above-mentioned examples of sound-correspondence in Sumerian and Georgian and the examples quoted in B and C are perhaps not sufficient for our comparisons, but we have no other materials, and therefore we close this chapter. We may, however, remark that if Sumerian had the affricatives—and that is not improbable—they were expressed by the same cuneiform signs as the corresponding simple consonants. In any case, the fact that in the cuneiform there are no special signs for the affricatives cannot be considered as a proof that the affricatives themselves were altogether lacking in Sumerian, nor should it deter us from a comparison of Sumerian with Georgian, which is so rich in affricatives.

II. SUMERIAN AND GEORGIAN WORDS (SELECTED ROOTS AND WORDS)

Philologists generally are of the opinion that the likeness of the grammatical structure of two languages is the most important proof of their common origin and relation—far more important than the likeness of their words. This is true, especially if we take into consideration that many languages can easily lose their original words, replacing them by loan-words, and at the same time preserve their primitive structure. But it is also true that the reverse can take place. Has not Anglo-Saxon lost more in the originality of its primitive grammatical structure than in its Anglo-Saxon words under the influence of French? However, all conditions being equal, the likeness of the primitive words of two languages no less proves their common origin than the likeness of their grammatical structure, *a priori* even more, because there is certainly more probability that the grammars of two absolutely different peoples should be similar than that their words be identical, the grammatical structure of a language being more a creation of pure human logic, alike for all peoples, than the pronunciation of the words, which depends, excepting some onomatopies, on more fortuitous causes and varies greatly according to various conditions. At any rate, I consider the list of Sumero-Georgian roots and words given below as evidence still more important than the comparative grammar (Part I) for establishing the relation between Sumerian and Georgian. I give but a list of more or less usual and primitive words, which can hardly be considered as borrowed words, and I endeavour also to quote such Sumerian words (especially from the *Selected Vocabulary of the Principal Roots in Sumerian*; a Sumerian grammar by Stephen Langdon) the likeness of which to Georgian words is either evident or more

or less probable. I have abstained from comparing a great number of Sumerian words with Georgian for the reason that their connexion may be very doubtful, though not absolutely impossible.

A


1. *a* < = ten. Br.¹ 8631 = *éšerit*; Meiss. 6560; var. *u*, *uku* (?). Georg. ა-თი *a-thi*, Min. ვი-თი *vi-thi*, Laz. ვი-თ *vi-th*, ვი *vi*, Sv. იყ-მდ *ie-šd* = ten. See numerals; var. *u*, see *u* = ten.

2. *ab* 𒀭 = recess, nest. Br. 3815 = *aptu*. Georg. უბ-ე *ub-e* = depth, deep place, thence "a valley" (Marr, t. iii, p. li). Var. *ub*, see *ub* = cavity.

3. *ad*, *adda* 𒀭 = father. Br. 4165 = *abû*. The root of this Sumerian word is preserved in many Georgian words, but not in Georg. მამა *mama* = father. I think the root of *ad*, *adda* is *d*, and is identical with Georg. roots დ *d* > ძ *d*, Laz.-Min. ჯე *d*. It is very probable that the root expressed primitively the idea of "conceiving", "creating the progeniture" (*ad-gal* = to conceive, be pregnant; Prince, Materials, p. 17). In Georgian, indeed, many words expressing this idea contain the root *d* > ძ > დ and even *t* (in Svanian): Georg. დედა *deda* = mother (a reduplicated root ?); და *da* = sister; დია- დია-ვი *dia-thi* (= *dia* + [xa]θi) = woman; ძე *dē* = son, child; სი-ძე *si-dē* = son-in-law, brother-in-law; ს-ძ-ალ-ი *s-d-al-i* = daughter-in-law, sister-in-law; ძე *dū* = female; მე-ძ-ავ-ი *me-d-av-i* = a prostitute; ძუძუ *dūdū* = teat, nipple (a reduplicated root); ძიძა

¹ Br. = Brünnow, *A Classified List*; Meiss. = B. Meissner, *Seltene Assyrische Idiogramme*.

dida = nurse, etc. Min. ღიბა *dia* = mother; ღა *da* = sister; ქუე *du* = female; სი(ნ)-ღა > სი(ნ)-ჟა *si(n)-da > si(n)ḡa* = son-in-law, etc. Laz. ღა *da* = sister; ოხორ-ჟა *oḡor-da* = house + wife = house-wife, wife, etc. Sv. დიდ *did*, დი *dī*, დიბა *dia*, ტი *ti* = mother; უდ-ილ *ud-il* = sister. Now, perhaps the Sumerian root *gm* > *dm* is connected with the root *d* of *ad*, *adda* (*dam* = husband, wife; *du*, *dumu* = son). In this case we can compare with those *d* and *gm* > *dm* Sumerian words, and with the above-mentioned Georgian-Lazian-Mingrelian-Svanian examples also Georgian *dm* > *dm̃* words: Georg. ძმა *ḡma* = brother; Min. ჟიმა *ḡima* = brother; Laz. ჟეჟმა *ḡuma* = brother; Sv. ჟიმაღლ *ḡim-al* = brother; also Georg. ბი-ძა(მ)-ი *bi-ḡa(m)-i* = uncle, etc. Besides, the Georg. *ḡe* = son is derived from the verb *ḡeb-na* = to beget, the root being *ḡb*(?); see Sum. *du*, *dumu* = son.

4. *ag*, *aga*, *agga* - = (1) do, make, construct; (2) rule, lead; (3) present, grant; (4) speak, pronounce, utter. Br. 2778 = *epēšu*; Br. 2775 = *banū*; Br. 2785 = *nahū*, etc.; Meiss. 1822 = *epēšu*, etc.

In Georgian we have many *g*-rooted words with exactly the same meanings: (1) გ-ება *g-eba* = to make, to build, to construct; (2) გან-გ-ება *gan-g-eba* = to rule, to govern, etc.; (3) გ-ება *g-eba* = to present, to meet; (4) გ-ება *g-eba* = to answer, to utter (see Marr, t. iv, p. რმბ *rmb*). Laz. root გ *g*: მო-ვო-გ-უბ *mo-vo-g-um* = I build; ოხო-ბა-გ-ით *oxo-ba-g-iθ* = we meet each other. The same roots are found in Mingrelian and

Svanian. Besides, the Georg. გ *g* has also the following meanings: (1) გ-ებდა *g-eba* = to be, to exist; (2) გ-ებდა *g-eba* = to be able; (3) გ-ებდა *g-eba* = to fix a thing on another; (4) გ-ებდა *g-eba* = to spread out (sheets, linen, etc.).

I do not think that from the idea of "making", "doing", "constructing" the ideas of "cutting", "setting forth", "speaking", and "be wise" can be derived, as Prince maintains. In Georgian, too, almost all the above-mentioned ideas contained in *g*-rooted words are not derived from the idea of "making". On the contrary, the Georg. გებდა *geba* = to build, make, is quite distinct from გებდა *geba* = to meet, or გებდა *geba* = to speak, etc. In Sumerian, it is very probable that the case was the same. Prince's explanation that the ideas developed—make, set forth, set forth in words, speak, etc.—seems to me absolutely impossible. It would be possible to derive every idea from every other by such a process. Probably the external phonetic likeness of the *g*-rooted words induced Sumerians to express them all by one and the same Cuneiform sign.

5. *ara* 𒀭 = to go, to bring. Br. 4865 = *aláxu(ra)*; Meiss. 3328 (*ri*) = *aláxu*. Georg. root რ *r* = to go; რე-ბა *r-eba* = to go, to wander; სი-არ-ულ-ი *si-ar-ul-i* = going, walking, wandering; Laz.-Min. ულ *ul* (*r > l*), ვ-ულ-ურ = I go. Note the Georg. form *vl*, ვლ-ა *vl-a* = to go. Cf. also Hald. *aruni* = they brought.

6. *as* 𒀭 = one. Georg. ერ-თი < *ეშ-თი *er-θi* < **es-θi* = one; Laz. არ-თი *ar-θi*, არ(*აშ) *ar(*as)* = one; Min. არ-თი *ar-θi* = one; Sv. ეშ-ბუ *es-βu* = one.

7. *a-zag* 𐎶𐎵 = bright, clean, pure, holy; also silver (Prince). Br. 9889 = *elēlu*, Br. 9890 = *ellu*, Br. 9891 = *aspu*, etc. Georg. roots: ცხ *θq̄*, Min. ჩხ *θq̄*, Sv. ლხ *sq̄*. Georg. ცე-ცხ-ლი *θe-θq̄-li* = fire (this *θe* must be a prefix = **se* > **si*). Min. და-ჩხ-ირი *da-θq̄-ir-i* = fire. Sv. ღო-ლხ-ი *li-sq̄-i* = to burn with fire. Georg. ციხ *θia* = fire; ციხ-გი *θiagi* = ray of the sun; ჯე(რ)-ცხ-ლი *ve(r)-θq̄-li* = silver; Min. ჯე(რ)-ჩხ-ილი *va(r)-θq̄-il-i* = silver; Sv. ვო(რ)-ჩხ-ილი *vo(r)-θq̄-il* = silver. Sum. *a-zag* is derived, according to Langdon, from the root *sig* = be bright, shine, etc. This root is also identical with the Georg. სხ *sq̄* (*sq̄* > *θq̄* > *θq̄*, also Sv. ლხ). Indeed, we have Georg. სხ-ივი *sq̄-iv-i* = ray (of the sun, moon, etc.). Then we have ბ(რ)-წყენა *b(r)-ik-ena*, ბ(რ)-ჭყენა *b(r)-ikv-ena* = to shine, to be glittering, to be bright (*sq̄* > *θq̄* || *ik* > *ikv*). See *sig* = to shine.

B

8. *ba* 𐎶𐎵 = to apportion, to diminish, half, something portioned out (perhaps from *bar*). Br. 112 = a ration. If this word is really derived from *bar* = side, then it is connected with Georg. ფარ-დი *far-di* = an apportioned part; so, for instance, when two brothers or co-proprietors *divide* a piece of ground or any other kind of possession, each receives his *far-di*, i.e. his part. Also Georg. გვერ-დი *gver-di* (*g* > *φ*) = side, flank, rib; Min. გვერ-დი *gver-di* = side, flank, rib, and also half; Laz. გუერ-დი, გუერი *guér-di*, *guér-i* = half. See *bar* +.

9. *babbar* 𒂍 = the sun, brightness, shine, etc.; also light (Prince). Br. 7762, 7763, 7795 = *šamaš*. This word is derived from the root *bar* = shine. Georg. ვარ-ვარ-ი *var-var-i* (reduplicated root *ვარ *var*, just like Sumerian *bar-bar* > *babbar* > *babar*) = to be bright, brilliant, to shine, to be hot.

10. *bal* 𒁺 = root = to dig. Br. 269 = *hírû*. Georg. ფლ-ვა *fl-va* = to bury; სა-ფლ-ავ-ი *sa-fl-av-i* = the grave (Sum. *bal* = *hírû*). In this case also I think that Prince is mistaken in deriving the ideas contained in *bal*-words from each other. Prince proceeds as follows: the primitive idea was *bal* = to open, to have sexual connexion, thence "pouring out", "the seed", "dig", etc. By the same process he derives from each other the ideas of the other group of *bal*-words. But it seems to me unlikely that from the idea of "having sexual connexion" the ideas of "seed" and "pouring out" or "digging" (!) were derived.

11. *bar* 𒂍 = side, brother, companion; divide, decide; spread out; negative participle "no", "without". Br. 1729 = *aĥu*, 1730 = *aĥatu*, 1801 = *šahātu*; Meiss. I + 𒂍 = *bar-ra* = *la*, etc. Georg. გვერ-დი *gver-di* = side, flank, rib; Min. გვერ-დი *gver-di* = side, flank, rib, half; Laz. გუერ-დი *gúer-di*, გუერ-ი *gúer-i* = half (see grammar); Georg. ფერ-დი *fer-di* = flank, rib. ფარ-დი *far-di* = part, lot; თანა-ბარ-ი = (with + side) = equal; უ-ე-ბარ-ი *u-e-bar-i*, უ-ე-ბარ-ი *u-e-br-o* = (without + side) = unequalled, incomparable; და-ბარ-ება *da-bar-eba* = (to put (the word) at anybody's side) = to entrust a word to anybody to bring the message to a third person; მი-ბარ-ება *mi-bar-eba* = to entrust (anything

to anybody); გა-და-ბირ-ება *ga-da-bir-eba* = to make anybody pass at one's side. ვერ(ა) *ver(a)* = no, not; არა *ara* = no, not; Min.-Laz. ვარ *var* = no, not; Sv. უ *u*, ურ *ur*, also Georg. უ *u* = without (see grammar); Georg. გარ-ე *gar-e*, Min. გალ-ე *gal-e* = outside (?); Georg. გარე-შე *ga-re-se* = outsider (?); გარ-და *gar-da* = besides(?). Perhaps Sum. *bar* = *aḥu* = savage has some connexion with Georg. გარ-ე-ულ-ი *gar-e-ul-i* = (what is outside) = wild, savage (?). Georg. ფარ-ება *far-eba* = to spread out, to cover (Sum. *bar* = spread out). Min. ო-ფარ-ე *o-far-e* = back (Sum. *bar* = back). Perhaps also Georg. მარ-ად *mar-ad* = eternally, მარ-ად-ის *mar-ad-is* = eternally, მარ-ად-ის-ობა *mar-ad-is-oba* = eternity, have some connexion with Sum. *bar* = far away, behind, and *bar* = *ṣatu* = eternity (?). Many words are connected with Sum. *bar* in Georgian, Mingrelian, Lazian, and Svanian. But we think that *bār* = to spread = Georg. to cover (*far*) = Min. *o-far-e* = back (the covered, protected part of the body ?), also Sum. *bar* = *ṣatu* = Georg. *mar-ad* = eternally, must be different roots not connected with *bar* = side.

12. *bar* 𐎶, 𐎶𐎵 = shine. Br. 1744 = *barāru*, 1775 = *namāru*. Georg. ვარ-ვარ-ი *var-var-i* = shine, to be brilliant, be bright, be hot (see *babbar*); also Georg. ფერ-ი *fer-i* = colour.

13. *bi* 𐎶𐎵 = speak. The root is *abi* > *ab* (Langdon). Br. 5124 = *ḫibū*; Meiss. 3488 = *tamū*, 3478 = *nahū*,

Georg. უბ *ub*, უბ(ნ) *ub(n)* (?), უბ(ნ)ობა *ub(n)-oba* = to speak, speaking (?); სა-უბ-არ-ი *sa-ub-ar-i* = conversation.

14. *bil* 𒁕𒀭 = blaze, burn, clean. Br. 4595 = *sarāpu*; Meiss. 3100 = *kalū*. Georg. ბირ-ბილ-ი > *ბილ-ბილ-ი *bir-bil-i* > **bil-bil-i* (reduplicated *bil*) = the burning of the fire.

15. *bir* 𒁕 = shine. See *bar* = *barāru*; also Meiss. 5784 = *namāru*. Georg. root ბრ > პრ *br* > *pr*: ბრი-ალ-ი, პრი-ალ-ი *bri-al-i*, *pri-al-i* = to shine, to be brilliant.

D

16. *da* 𒃶 = a postposition. Georg. დ(ა) *d(a)*, თ(ა) *θ(a)* (see grammar).

17. *dug* 𒃶𒃶 = affliction, root *diġ*. Br. 5533 = *rapādu*. Georg. roots ტვ, ტყ, წყ *tk*, *tē*, *ik*: ტვ-ივ-ილ-ი *tk-iv-il-i*, ტვ-ენა *tk-ena* = to cause the suffering, to afflict; ტყვე *tkv-e* = a prisoner, captured; ტყვე-ნა > ტყვე(ნ)-ვა *tkvev-na* > *tkve(n)-va* = to seize, to capture (Sum. *diġ* > *dib* = to seize, to capture); წყ(ნ)-ა *ik(e)n-a* = to cause affliction, sorrow. I am not quite certain what Sumerian root corresponds to Georg. წყ-ილ-ი *ik-il-i* = to be afflicted, to be in sorrow, sorrow. It may be of the same root as Sum. *diġ* = seize, but also Sum. *sig* = be low, be dark (see *sig* = be low). In support of this view is the fact that Sum. *zib* = also "evening" = Georg. მ-წყ-ბ-რი *m-tuq-ri* = evening. As to *dāg* = *naḫāru* = break to pieces (Sum. *tag*), it corresponds to

Georg. root ტყ *tq*: ტყე-ვა *teq-va*, Min. ტყა-ნუა *tnq-ua* = to break to pieces (see *tag* = break to pieces).

18. *dag* 𐎠𐎣 = bright. Meiss. 5741 = *ebbu*, 5747 = *ellu*. Georg. დღ-ე *dġ-e* = day; Min.-Laz. დღ-ა *dġ-a* = day; Sv. *dag* *dēj* = day. Perhaps connected with *sig* = be bright? (*s* > *d*?). And Georg. *sġ* > *θġ* > *dġ*? Also Sum. *zag* (in *a-zag*) > *dag*?

19. *dag* 𐎠𐎣𐎶 = abide, repose, root *teg*. Meiss. 3868 = *nazāzu*. Georg. root დგ *dg*: დგ-ობა *dg-oma* = to stay, to abide; და-დგე *da deg!* = stay! სა-დგ-ობ-ი *sa-dg-om-i* = chamber, house; ა-დგ-ილ-ი *a-dg-ili* = place, spot. Connected with *sig* = *nazāzu*, *suġ* = *uġġu* (?).

20. *dam* 𐎠𐎣𐎶 = husband, wife. Br. 11109 = *aššatu*, 11113 = *mātu*, root *gim*. Georg. roots ქმ *qm* and ყფ *ḱp* = to do, to make, to create (Sum. *gim* = to do, to make, to create, from which *dam* (> *gam*) = husband, wife, is derived. Indeed, in Georgian we have ქმ(ნ)-ა *qm(n)-a* = to make, to create; ქმ(ნ)-ილ-ება *qm(n)-il-eba* = the creature; ნა-ყოფ-ი *na-ḱp-i* = the created thing, the fruit, the result (from ყოფ-ა *ḱp-a* = to do, to create, to make). Min. ქიმინ-უა *qimin-ua* = to make, to create, to do. Laz. ქომ, ქუმ, ქიფ *qom, qum, qip* = to do, etc., and ყფ *ḱp* = to do, etc. From this root ქმ *qm* comes, exactly as in Sumerian, Georg. ქმ-არ-ი *qm-ar-i* = husband; Min. ქომო(ნ)-ჲ *qomo(n)-di* = husband; Laz. ქომო-ჲ *qomo-d-i* = husband. But, remarks Professor H. Zimmern (private communication):

"Ob Sum. *dam* = husband, aus *gam* entstanden ist und mit *gim* etwas zu thun hat ist sehr fraglich, ebenso *dumu* = son." (See *gam* and *gim* = make, etc.)

21. *dar(a)* - 𒀭𒀪 = ram, he-goat; *a-dar* = female antelope. Br. 2947 = *turahu*; Meiss. 1870 = *turahu*.

Georg. ტურ-ი *tur-i* = ram, wild goat.

22. *dur* 𒀭𒀪 = (1) turn, twist, (2) weave variegated threads into a garment, be of various colours, variegated. Br. 3482 = *barāmu*; Meiss. 2226 = *barāmu*. Georgian

two independent roots: ქგრ *tr*; ტრი-ალ-ი *tri-al-i* =

to turn. I think with this root is connected: (1) Georg.

წრ-ე *tr-e* (*t > t*) = circle, circumference; (2) ჭრ *tr*,

ჭრ-ელ-ი *tr-el-i* = variegated, of various colours. This

root seems to be identical with ჭრ-ა *tr-a* = to cut.

Indeed, Sum. *dar* (> *tar*) means also "cut" (see below *dar*), and it is possible that Sum. *dar* = variegated is independent of *dar* = turn.

23. *dar* (> *tar*) 𒀭𒀪 = split, detach. See *tar* = cut, split, etc.

24. *de* 𒀭𒀪 = shine. Br. 4589 = *la'abu* = flame, 4582 = *diparu* = torch; Meiss. 3087 = *diparu*, 3091 = *la'abu*. If the root of this word is really *dib* (Langdon), then it is possibly connected with *tab* = burn. However, we have in Georgian two roots expressing almost the same ideas: (1) თე, თთ > თვა, etc., *θe*, *θo* > *θva*, etc.

= light; and (2) თბ (> ტფ) *θb* (> *tφ*) = heat, warmth.

(1) Georg. ნა-თე-ლი *na-θe-li* = light; თვა-ლი *θva-li*

(> *θo-li*) = eye; მ-თვა-რე *m-θva-re* = moon, etc.

(There are many words derived from this root in Georgian, Mingrelian, Lazian, and Svanian.) (2) თბ-

ილ-ი *θb-il-i* = warm, hot; სი-თბ-ა *si-θb-a* = heat,

warmth. (Thence the name of the city of Tiflis, capital of the kingdom of Georgia: თბილისი *tbilisi*.) Laz. root ტუბ *tub* = to heat, to be heated, to bake, etc.; Sv. ტებ-დი *teb-di* = warm. I am not certain whether Georg. roots თ *θ* and თბ *θb* are of the same origin. Personally I do not think so. It is probable, indeed, that Georg. თ *θ* is connected rather with Sum. tu 𐎢 (or tu 𐎢?).

25. *di* 𐎠𐎣 = go, walk. Georg. root დ(ი) *d(i)*, დი(ნ) *di(n)*, დე(ნ) *de(n)*: და-ვ-დი-ვარ *da-v-di-var* = I go, I walk ს-დი-ს *s-di-s* = it flows, it goes (from him, it etc.); წა-დ-ი *ta-d-i* = go! მ-დი(ნ)-არ-ე *m-di(n)-ar-e* = a river, from დე(ნ)-ა *de(n)-a* = to go, to flow. See *du* = to go.

26. *dib* (> *dig*) 𐎠𐎣𐎶 = come, advance. Br. 10676 𐎠𐎣𐎶 = *ba'u*, 10679 = *elēu*; Meiss. 3646 = *elēu* (?). Georg. root წ(ი), წ(ე), წვ *i(i)*, *i(e)*, *iv(?)*: მო-წე-ვა *mo-le-va* = to come, to advance; და-წე-ვა *da-le-va* = to attain (*atteindre*); წე-ვა *le-va* = to draw; წვე-ვა *ive-va* = to invite, to lead in. Is the Sum. *dib* > *dig* connected with *sig* = rush forward, with which the above-mentioned Georgian root is also connected?

27. *dib* 𐎠𐎣𐎶, root *dig* (*dig*) = seize, afflict, hold. Br. 10674 = *ahāzu*, 10677 = *ba'aru*, 1068 = *kamā*, 10694 = *sabātu*, 10699 = *tamāhu*; Meiss. 8776 = *xalā*, 8185 = *tamāhu*. Also *dab* = death (*mātu*), literally "the seizing away"; *dab* = (*mātu*) = dead, etc., seize with love, etc. (Prince). Georg. roots ტვ *tā*, ტყ *tā*, წყ *tā*, and perhaps also წი *iq*—Georg. *twiv-il-i*, *tēna*, *tēna*, and

luqili—(see *dag* = affliction); *ᲙᲡᲗᲗ* *tkve* = prisoner, etc. (see the same *dag*). Then a vulgar expression for "having sexual connexion": *ᲙᲡ(Ბ)-ᲗᲗ* *tk(n)-va* = *coitus* (the same root as *ᲙᲡᲗᲗ(Ბ)-ᲗᲗ* *tkve(n)-va* = seize, capture).

28. *dig* *ᲙᲡᲗ* \rightarrow = seize, bind (Langdon); see above *dib* = to die, dead. Br. 4388 (-g), also 4390 (-g) = *mātu*; Meiss. 2911 = *mātu*; also Br. 1517-19, Meiss. 864-5. (Also Langdon, *dig* = seize, bind = *lu'ab*, *li'bu*.) See above *dib* = seize.

29. *diq* *ᲙᲡᲗᲗᲗ* = stone (Prince); cf. *dag* *ᲙᲡᲗ* = *abnu*. Br. 5229, also Meiss. 2594 (*dih*). Georg. *თიბ-ა* *thiq-a* = clay; Min.-Laz. *დიბ-ა* *diq-a* = earth, ground.

30. *dim* *ᲙᲡᲗ* (> *gim*) = create, produce, educate, be, exist. Br. 9116 = *bašū*, 9118 = *epēšu*, 9112 = *banū*; Meiss. 6867, I + *ᲙᲡ* = *itpišu* = intelligent (Del. Assy. Lesestücke, Fünfte Aufl., 1913, Glossar.: *itpēšu* = umsichtig, klug). Georg. roots: *ქმ* *qm* = to create; *ყფ* *κφ* = to create, etc. (see *dam* = husband). Also Georg. *ყოფ(Ბ)-ა* *κoφ(n)-a* = to be, to exist. I do not think that this root belongs rather to *dig* (> *dim*) = grow up, than to *gim* = to create.

31. *du*, *dug* *ᲙᲡᲗ* = to speak, to meditate. Br. 525 = *dubābu*, 531 = *κibū*, etc. Georg. roots *ᲙᲡᲗ* > *თქ* > *თბ(Ბ)* *tku* > *θqu* > *θq(r)*: *სი-ᲙᲡᲗ-ა* *si-tku-a* = word; *თქ-მა* > *თქ-მა* *θq-ma* > *θq-ma* = to say; *თბ(Ბ)-ობა* *θq(r)-oba* = to say, to relate. Laz. root *თქ* *θq* = to say, to relate; also Laz. *სი-ტ-ა* *si-t-a* (*t* > *tk*?) = word. I think also that the Georg. root *ᲙᲡ* belongs here: *ჭკუ-ა* *ᲙᲡ-a* = intelligence, reason; Sv. *ლო-ჭკუ-ბი*

li-tva-ri = to think, to meditate; *ლყ-ელ* *tā-el* = intelligence, wit. Also Laz. *წჳ* *tv*: *ჟ-წჳ-ი* *u-tv-i* = I say; and Georg. *ლყ* *tā*, *წყ* *tā*: *შე-ლყ-ობა* *še-tā-oba* = to inquire, to notice, to know; *ჟ-წყ-ება* *u-tā-eba* = to know, etc. I think that Sum. *sig* = *dabābu*, *sig* = *mērištu* are of the same root as *dug* (*s > d*). See *sig* = oversee, rule.

32. *du*, *dug* *Δ* = good, be good. Br. 8239 = *tdbu*. Georg. roots *დბ* *db*, *დგ* *dg*: *დობ-ი-ა* *dob-i-a* = it is better; *შ-დობ-ი* *m-dob-i* = better; *დობ-ნა* *dob-na* = to surpass, to vanquish (to be better). Min. *დგ-ირ-ი* *dg-ir-i* = good. I think in this case also that this *dug* is connected with *šag* = pure, good (see this *šag* and *šig* = pure, good). Here also *š > d*. Thus not only Sum. *d* || *z*, but it is very probable that Sum. *s*, *š* || *d*, or *d* || *s*, *š*; indeed, we have: *dib* (?) = afflict || *sig* (?) = humiliate (Georg. *tā*, *tā*, *tā*, *tā*); *dug* = speak || *sig* = speak (Georg. *tā*, *θq*, *tā*); *dug* = good || *šag* = good (Georg. *db*, *dg*); *šib* (> *dig*) = come, advance || *sig* = plunge forward (Georg. *l(i)*, *lv*). But *dug* = be full, and *dug* = be good, have nothing to do with each other. In this case, too, Prince is mistaken: he derives from the idea *dug* = plenty *dug* = love a woman sexually, and from this latter the idea of "being pleased" of "goodness". But it is very doubtful that the logic of Sumerians proceeded in such a way. Here also the *dug*-words are only phonetically similar, and were therefore expressed by the same Cuneiform sign. Indeed, in Georgian we have for *dug* = good the root *db > dg*, and for *dug* (comes from *dig* = seize) = love a woman sexually, the root *tā(u)*, two entirely independent roots. (Besides, I think that *dug* = to be full, is connected

with *sig* = be full, from *sig* = to pour upon, Georg. *sq* = to pour out, and thence 𐎶𐎵 *ik*, 𐎶𐎵-𐎶𐎵 *ik-va* = to measure liquids and dry substances ?)

33. *du* 𐎠𐎥 = go. Br. 4860, S^a II, 42. Georg. root ღ *d*: ღ-𐎶-ღ-𐎶𐎵 *da-v-di-var* = I go, I walk, etc. (see above *di* = to go).


34. *dā* 𐎠𐎥 = make, do, construct, build, establish, set up. Br. 5248 = *banā*, 5254 = *epēnu*, 5269 = *šadānu*; Meiss. 3608 = *banā*. Georg. root ღ(𐎶) > 𐎠(𐎶) *d(v)* > 𐎠(𐎶) : ღ𐎶-𐎶𐎵 *de-ba* = to put, to rest, to lie: 𐎶-ღ𐎶𐎶-𐎶 *s-dev-s* = it lies, it rests; *s-dev-s* = it lies, it rests. Laz. root ღ𐎶 *dv*: ღ𐎶-ღ𐎶𐎶-𐎶𐎵 *do-dva-φu* = to set up, to put, to place.

35. *du*, *dumu* 𐎠𐎥 = son. Br. 4081 = *māru*. From the same root as *ad(da)* = father, and *dam* > *gam* = husband, wife (?). Georg. 𐎠𐎶 *dē* = son, progeniture. It is, indeed, not impossible that the Georg. roots ღ , $\text{𐎠$, 𐎶 *d*, *d*, *d* are connected with 𐎶𐎵 , 𐎶𐎵 *qm*, *kφ* = to create. Cf. Old Georg. 𐎶𐎵-𐎶(𐎶)-𐎶 *deb-(n)-a* = to bear a child (Marr, t. iv, p. ღ𐎶𐎶𐎶 *lra*). It may be also that the Georg. roots 𐎠 > 𐎠𐎶 (?) > 𐎠𐎶 (*d̄m-a*) = brother = Sum. *d̄*, *dm* (*addu*, *dumu*) are quite independent roots from *qm* = Sum. *gim* = to beget, to create. See *dam* = husband, and the remark of Professor H. Zimmern.

36. *dug* 𐎠𐎥𐎶 = vessel. Br. 5893 = *šarpātu*. Georg. ღ𐎶-𐎶-𐎶 *dug-i* = a vessel (a vessel for wine and water, a clay vase).

37. *dug* 𐎠𐎥 = knee. Br. 8215 = *birkū*; Meiss. 6117 = *birkū*. Georg. root 𐎶𐎵-𐎶 *θog* (Sum. *d* || Georg. *θ*):

ხოჭ-ვა *θoq-va*; და-ხოჭ-ება *da-θoq-eba* = to kneel.
 Sv. ხვეჭ *θveq* = knee. (In Georgian, Lazian, and Mingrelian the root *θq* has been replaced by Semitic *ךך* in the substantive "knee": *brκ* = Georg. **mrq* > *mq*; *muq-li* = **murq-li* = knee; Min.-Laz. *brg* > Sem. *brκ*: *burg-ul-i* = knee.)

38. *dun*  = cavity, hole, trough, canal, trench. Br. 9870 = *pitá ša nāri*, 9868 = *pitá ša iršiti*. Georg. root თან *θan*, and Sv. თუნ *θun*, met in the words for clay vessels: Georg. ქო-თან-ი *qo-θan-i* = pot (clay-pot); Laz. ქვა-თან-ი *qúa-θan-i* = clay-pot (*qo-θan-i*, *qúa-θan-i* = *qva* = stone + *θan-i* = cavity (?). This is very probable, because the original meaning of Georg. *qva* = stone, seems to be "clay"). Sv. თუნ-ი *θun-u* = pot, jar. See *udun* and *tun*.

(To be continued.)

- 106 107 108 109 110 111 112 113 114
- 115 116 117 118 119 120 121 122 123
- 124 125 126 127 128 129 130 131 132
- 133 134 135 136 137 138 139
- 140 141 142 143 144 145 146 147
- 148 149 150 151 152 153 154 155

THE ARCHIVES OF AN ORACLE: NOTES ON THE TEXT

By L. C. HOPKINS

IN these Notes the numbers refer to the similarly numbered phrases and sentences published in the January number of the Journal.

5. Here, and elsewhere on these bones, the word *hsiang* is always written with the once homophonous character for sheep, *yang*, both probably in ancient times being pronounced approximately *tsāng*.

8. I do not know why a cowrie-shell was called *chi yü*, a lucky fish, nor why on these imitation cowries the last two characters are fairly often 乙 魚 *i yü*, where I have assumed, in default of any better explanation, that 乙 stands for its homophone, 一 *i*, one.

15. How is it we find the Emperor T'ai Mou here exceptionally styled by his Temple-name, and not, as ordinarily in the bones, by the former designation?

16. Here, and often, though not always, on the bones, *fu*, happiness, is written without the determinative 冫 *shih*, presage.

20. *Li*, in, now 裏, is always written 里 on the bones.

25. The phase of the character 龍 *lung*, dragon, that we find on these bones is very interesting. The freedom of the original pictogram of a dragon soaring in the clouds has not yet quite hardened into the fixed rigour of the schematic character. We still see in the left half the traces of that writhing form, the head and forepart with scales, indicated by transverse strokes. This has become the left half of the modern character. The right varies considerably in the not too numerous examples open to scrutiny, but usually seems to represent the convoluted hinder part, ending in a trifid tail, and

transformed into the anomalous right side of the present form.

25a. Probably the *hsiao lao* and *ta lao* of the bones are equivalent to the *shao lao* and *t'ai lao* of the Book of Rites. The former consisted, according to the commentators, of a lamb and a young pig, the latter of the same with an ox.

28. The original character for *ling* is very curious, and if I am not deceived, it leads to certain tentative conclusions of interest, and, in their degree, of value. I therefore ask the reader's patience while we study it. Here, and in Nos. 29 to 32, and, in fact, wherever it occurs in my collection, it is, within slight limits, thus shaped, 𠄎 or 𠄏. What *word* does it point to? And further, what is the depictive intention, the graphic significance of the *character*? Undoubtedly the word is *ling*, now written 靈, but earlier 𠄎, under which latter our form is found in Wu Ta-ch'êng's *Shuo Wen Ku Chou Pu*, cited from a bronze bowl. Wu gives the context transcribed in modern writing, 靈命難老 *ling ming nan lao*, "a deathless destiny," literally "a fair or fine destiny that cannot grow old". Under his first entry he cites the analogous phrase 𠄎終 *ling chung*, "a fair ending," which he calls "an auspicious phrase of the ancients", equivalent to the more modern 令終 *ling chung*.

Ling is not always adequately translated by such adjectives as good, fair, or fine, but implies something marvellous or magical, as I have here rendered it.

This being what the *word* connotes, what can be discovered as to the graphic significance of the *character*? What does the latter represent? Wu Ta-ch'êng, though he places our form under the character 𠄎, does not explicitly mention whether he considers it, in its composition, a mere variant of that sign, or an independent symbol. But another authority, a little senior to him,

Wu Shih-fên, quotes the same passage from the same bronze (*ling ming nan lao*), but without penetrating the disguise of the figure. He guessed it to stand for 受 *shou*, to receive. Such an equation, however, is really not to be justified by any of the very numerous examples of the character *shou* that are known, and his namesake's reading *ling* is certainly sound. That being postulated I venture to propose the following explanation of the peculiar form before us.

The most difficult words to write pictographically are usually those of highly generalized meaning, words having a wide sweep of application, but of high significational tenuity. Such a word is *ling*, magical, wonderful, fine, spiritual. How did the Chinese solve the problem of giving a written form to this elusive word? As often before, by the device of "borrowing". By using an already current homophone. Now there exists a syllable *ling*, meaning a handbell. The *Liu Shu Ku* briefly describes this as consisting of a "round rim within which is attached a globular clapper (凡 *wan*), making when shaken a ring-a-ring sound (literally 'ring-ring-ly', 令令然 *ling-ling-jan*). Hence its name is *ling*". This word is written 鈴. I now suggest that in the form occurring on the bones and, as we have seen, once also on a bronze, we have an ancient variant of 鈴 *ling*, but that instead of being a phonetic compound, as the latter is, ours is a pure pictogram. I see in the upper part an almost straight-sided bell, the left side made shorter than the right to accommodate the lower part of the character. The short transverse strokes, always on the right side joined on their inner ends, but not so on the left, perhaps represent panels or other external designs. The straight, nearly vertical median line is the rod of suspension, below and rather to the left of which is what looks like a hook. This hook, however, implies an earlier annular form, just as 丄 *ssä* is a later

modification of 𠂔. Hence I infer an ideal type 𠂔. Lastly, there is in close proximity to the clapper and sometimes turned to the right, and sometimes to the left, the sign for right-hand, 又 *yu*, not, I imagine, to suggest that the clapper is touched by the hand, but placed in the usual position in compound characters for that sign to appear, and merely to suggest the *action* of ringing.

34. The characters are from the inscription on a dragon-shaped object, and are of exceptional fineness of execution. The material is, I think, not bone, but steatite, and the object itself has been illustrated by Dr. Perceval Yetts in fig. 5 of his paper on Symbolism in Chinese Art, read before the China Society on January 18, 1912. Dr. Yetts thought the carving probably represented the heads and fore-quarters of two tigers or leopards, and suggested that the specimen may have formed the handle fixed to the lid of some vessel. On the whole, I believe that the object to which the fragment was attached was probably a disk, and one of a style and execution rendering it much to be regretted that it did not fall into Western hands. I may mention that the characters of No. 97 are on one side of this.

35 and 36. No such meaning as "male" is given by the dictionaries to the first character in these two phrases. Nevertheless I am pretty confident that such is the sense, and that, in this connexion, the character has since been replaced by 牡 *mou* or *mu*. It is impossible to develop the argument here.

41. The original of the second character is written 𣎵, and it may be asked why this is not 酒 *tsiu*, wine. That is, indeed, the equation given by Lo Chên-yü in his *Yin Shang Chêng Pu Wên Tzû K'ao*, p. 21, though he too thinks that the three short strokes are not *water* as the Shuo Wen supposed, but represent wine-drops being poured out from the vessel. This view may well be correct. However, I am confirmed in my reading by

the learned Japanese author of the *Chōyōkaku Ji Kan*, who cites two essentially similar forms, and no others, under 酎 *chou*. But there is another reason, which is that the three dot variant for *water*, in combination, is not to be found, to my knowledge, earlier than Han times. Very possibly the *Chōyōkaku's* suggestion is right, that these three short strokes (sometimes placed on the left, sometimes on the right side) are here for 米 *mī*, grain, to indicate spirit made from grain. The same, it thinks, is the case in 彝 *i*, sacrificial wine vessels, where the *rice* of the modern form is replaced by two short strokes.

42. In the original specimen (H. 783), described under No. 157, see p. 59, six characters are crowded on the small disk below, and as in various instances cited by Lo Chên-yü, these two characters must be read from below upwards.

50. The *ta lao* is no doubt the *tai lao* of the Book of Rites, the Greater Sacrifice, offered on certain occasions by the Emperor, as the *shao lao* (see No. 25 A) of the same work was offered by the feudatory princes. The Greater Sacrifice consisted, it is said, of an ox, a lamb, and a young pig (thus corresponding to the *suovetaurilia* of the Romans). The Lesser Sacrifice omitted the ox.

53. This phrase, and No. 66, occur in H. 783, previously described, and accord with the symbolism of this disk. As Mayers wrote in his *Chinese Reader's Manual*, p. 288, "the Moon, representing the concreted essence of the feminine principle in Nature, as the masculine principle is embodied in the Sun. The Moon is consequently regarded as chief and director of everything subject in the cosmic system to the Yin 陰 principle."

54. On the face of them these two characters mean "great moon", a well-known phrase in modern Chinese for a month having thirty days, as distinguished from the "small moon" of twenty-nine. But I do not think such

a sense applies in this or the other contexts where the phrase occurs on the bones. In one of the instances, a balancing sentence immediately follows, identical in wording except that 大月 *ta yueh*, in the upper part, is replaced by 大羊 (modern 大祥 *ta hsiang*), great prosperity, in the lower. The ground for interpreting 月 *yueh*, moon, by its homophone 悅 *yueh*, joy, seems fairly strong.

Nor will this seem far-fetched or strange to those who have familiarized themselves with the dominating influence of symbolism on the Chinese mind, on which Dr. Perceval Yetts has written so lucidly in his *Symbolism in Chinese Art*.

This symbolism in early times was largely one based on what may be called allusive homophony. And a special group of these miniature carved objects in the various collections now dispersed through Europe and America have no other aim than to exemplify this principle. If we find a model of a tortoise alone, it is as a vehicle to convey wishes for some lasting good, probably long life, because the word for "tortoise", *kuei*, and that for "lasting", *kiu*, were anciently homophones, as they still are in the colloquial of Amoy. If in other examples we find the same creature holding a musical-stone in its mouth, it is because the words for the former, and for happiness, have the same sound *ch'ing*, and the two models combined thus express, and may perhaps attract, "enduring happiness." In another instance the tortoise holds a crescent moon, to convey a prayer for "lasting enjoyment", since moon and enjoyment share the same sound, *yueh*.

Such is the explanation of these little models à *double entente*, these unspoken and materialized puns.

68. For the explanation of this strange expression, see the Note under No. 108.

71. Literally, the "prospective blessings", of the Sovereign's arrival in a neighbourhood.

75. The character here transcribed as *hui*, regret, is 悔. I believe this decipherment is right, and that in form it answers to the right side of the modern character, where *heart* is a later and differentiative addition.

76. *Tsai*, calamity, is in the original, written in the old form of 哉 *tsai*, minus the 口, and not as in the modern shape, *water over fire*.

83. If we suppose these carved objects in bone to be identical in shape with the valuable originals, perhaps made of jade, of which they were miniatures, mementos, and, as it were, "counterfoils," then a "moon-disk" was a tortoise holding a crescent moon in its mouth, and touching with its front feet the two horns of the crescent.

88. This astronomical indication will no doubt convey more to some sinologists than, I regret to say, it does to me.

91. I call attention to the occurrence of the expression *fu tien* in this place. With the sense of "field of happiness", it is a well-known Buddhist phrase, but apparently is not found recorded in earlier-than-Buddhist literature. On the other hand, *t'ien* is often on these bones used for its homophone meaning "to hunt". But on the whole, the full phrase scarcely seems quite appropriate for a wish that the Powers "may grant good sport", the only alternative rendering I see.

100. This phrase, preceded by different cycle-dates, is repeated several times on this specimen, and the object of the inquiry is not specified till after the sixth repetition.

107. Just as the character for sheep almost always on these bones stands for its homophone meaning prosperity, so *lu*, deer, may here equally well stand for its homophone, 祿 happiness, success. I cannot tell for certain which is meant, and very possibly, "may his hunting be in every way successful" would be the correct rendering.

108. There is in the *Li Ki*, or *Book of Rites*, as the text stands now, an expression 作龜 *tso kuei*, which,

though it appears to mean literally "to make or do the tortoise", is understood as meaning "to operate on the tortoise", as Couvreur translates it, viz. to cover the shell with ink and expose it to fire. In the present fragment (H. 819) and in others, the character here treated as 作 *tso* is written or rather incised 𠄎 or 𠄏. Whether the equation with *tso* is right or wrong, I conjecture that the character found in the *ancient* text of the *Li Ki* was written as ours is here. The form 𠄎 is cited in the Supplement to Wu Ta-ch'êng's *Shuo Wen Ku Chou Pu* (p. 8, 2nd edition), among other unknown characters, but with the note that Ch'ên Chieh-ch'i read it as 作 *tso*. It is troublesome that the form can scarcely be distinguished from 亡 *wu*, not, on the bones.

The phrase 來祥 *lai hsiang*, constantly occurs on these relics. I have rendered it "for luck's sake" as a formula, though the bald literal translation, taking the verb *lai* causatively, is "to cause luck to come".

It is possible that here and elsewhere 吉日 *chi jih* is equivalent to 初吉 *ch'u chi*, "the first (being a) lucky day" of the moon. Kanghsi gives *chi* alone, as the first day of a month.

There is nothing to prevent the last four words of the passage from meaning "to-day rain has come".

109. As will be seen in the Plate, *lu hsiang*, "success and prosperity," are written with their former homophones *deer* and *sheep*, a felicitous way of wishing the king good sport, for the word *yang* includes antelope as well as goats and sheep.

111. The eighth character is a very remarkable one. I agree with Lo Chên-yü in believing it to stand for 召 *shao*, a place in what is now the Province of Shansi, and originally the appanage of Shih, "one of the ablest of the men who lent their aid to the establishment of the dynasty of Chow" (Legg's *Chinese Classics*, vol. iii,

pt. ii, p. 420). The modern form adopted on p. 54 for this place-name is objected to by Chinese purists, and it would have been better to have printed 召. I also accept Lo's equation of the last character of the passage with *tsai*, harm.

118. The character transcribed by me as *yung* is left unidentified by Lo Chên-yü. There was a place called 雍城 Yung ch'êng, in Honan, which first character *may* be a mere variant of the form written on p. 54. See Playfair's *Cities and Towns of China*, p. 416.

119. This is a decidedly cryptic statement. Wu I was a Shang dynasty ruler reigning from 1198 to 1194 B.C., and the wording of the sentence would be simple had Wu I been a date and not a name.

The specimen is also interesting from containing near the broken-off edge an interrupted text, of which we can read "On the day *ping-ch'ên* took omen . . . Wen Wu 文武 . . . the victims". Now if, as seems probable *prima facie*, the characters *wên wu* refer to Wen Wang and Wu Wang, the founders of the Chou dynasty, it is evident that we have to do with an inscription of Chou, not of Shang, date. Then why this reference to omens from a sovereign of the ousted line?

121. I take this passage to be a note made, perhaps partly before and partly after the sporting expedition referred to, which was probably with hawks and hounds. The character here transcribed *chi*, recorded, is left undeciphered by Lo Chên-yü, and is conjectural on my part. It is also possible that "215" should be "115". But as in numerous other passages, both on bronzes and these bones, the multiple of the hundred (or of ten) is so closely attached to the following figure that it is hard to know in this case whether both horizontal strokes or only the upper one are to be reckoned. This peculiarity is frequently found on bronzes in enumerating gifts of horses, and where in modern Chinese 馬四匹 *ma sai*

p'i, "of horses four head," would be written, we have in numerous instances, first, the old form of *ma*, then three horizontal strokes, then the fourth horizontal, serving both as the fourth digit and as the upper stroke of the last character, *p'i*.

I suppose *chui* to mean various sorts of small birds, such as larks, finches, etc. Barring these, the bag was not excessive.

I can find no record of a place or region called 穆 *Mu* (not 𠄎 *Ling*, as wrongly transcribed and transliterated by me on p. 55).

122. Notice in this, and in the two following extracts, as well as in others, the interposition of the word indicating the subject of the inquiry between the characters *pu* and *chéng*. If, etymologically, 卜 *pu* = 支 *p'u*, to strike, as it probably does, the literal sense of *pu hsing chéng* is "to strike a journey omen", and so in other cases. The "striking" would cover the process of boring and applying heat to the tortoise-shell, or other bone, by which the necessary cracks in it were produced.

123. The equivalence of the fourth character, the curious human figure holding something like a stick, but in many other examples on bronzes apparently letting fall a sword from his hand, has been variously guessed at. I believe it corresponds in point of form to 𠄎 *i*, which probably represents an earlier form of modern 疑 *i*, doubt, and has the same sense. But the author of the *Chōyōkaku Ji Kan*, after discussion, decides that the bronze examples stand for 矢 *shih*, arrow. I cannot agree. Hence our figure had better be regarded as doubtful by the sceptic or "doubtful" by the believer.

126. The equation of the last character with 𠄎 *hsiung* is not quite certain. In the earlier stages of the study of these bones, the late Mr. Chalfant and myself hankered after 占 *chan* as a solution, but that will not work out in the texts. In any case, the word involved must be,

on the analogy of similar expressions in similar positions, one of ill-omened meaning.

128. On further consideration, I think the fourth character must not be equated with 行 *hsing*, but should be as in No. 130, 𠂔 *ts'u*, hurriedly, to hasten.

Shang T'ien appears to be a place-name, but I can throw no light upon it.

Note the character *yü* in the Plate. It is here used as a place-name. But its sense of bearing or rearing children is illustrated by the composition of the character, viz. *mother* on the left and a new-born infant, indicated by the character 孑, *ts'ü*, inverted, as at birth, below and to the right. A good example of the suggestive compound class of characters.

130. The equation of the fourth character is to some extent conjectural.

This fragment, which contains more than one very piquant riddle, apart from the passage translated, is, in my view, one of the most valuable in my collection, for it records the words of one who uses the phrase *Yü I Jen*, "I, the One Man," only uttered by the reigning Son of Heaven. Consequently this must be a record of a sovereign either of the Shang or of the succeeding Chou dynasty. The first column opens with "On the day *Kuei-ch'ou* took an omen as to the King's words" (卜王曰貞 *pu wang yueh chêng*), then follow six characters the purport of which I cannot fully understand, then the translated passage, which is succeeded by what appears to contain a statement as to sacrificing to a personage whom Lo Chên-yü conjectures to be 主癸 *Chu Kuei*, the father of Ch'êng T'ang, the founder of the Shang dynasty. (See Chavannes' *Mémoires historiques*, vol. i, p. 176.)

131. I think that the second character, though it seems to be 川 *ch'uan*, stream, stands here for the word *shui*, water, used in the sense of floods. A similar

sentence occurs on another fragment, H. 25, where 正 *chéng*, the first month, takes the place of 九 *chiu*, the ninth.

132. Notice here and in Nos. 134 and 135 the characteristic use of 其 *ch'i*, after the subject of the sentence, as though it were "The king his hunting". As Legge says, speaking of its use in the *Shu King*, "Very often it comes between the nominative and the verb, making the nominative emphatic" (*The Chinese Classics*, vol. iii, pt. ii, p. 654).

133. I can find no trace of any place-name written as in the text. Can it be a variant of 雩, also written 雩, *yü*, the rain-sacrifice, which also forms part of the name of a place in Honan?

134. There was an ancient locality of this name in what is now Shantung, apparently not far from the present border of Honan. (See Chavannes' *Mémoires historiques*, vol. i, pp. 15-16, n. 4.)

136. Professor Parker has pointed out to me that to render 于 *yü* by "and" is not easily justified. It is true, and perhaps we should read "to go to", in place of "and".

139. The first character of this sentence on p. 56 is wrongly printed. It should be 己 *chi*.

The original of the fifth character, which I have conjecturally equated with 祠 *ts'ü*, represents, in point of form, the left-hand half of 辭 *ts'ü*, this left-hand half when written alone being said by the *Shuo Wen* to stand for a word *luan*, and defined as "to arrange, control". This sense is the exact opposite of the common word *luan*, which means "disordered, confused". It is to be suspected that there is some error in the *Shuo Wen's* text, and that the definition is right, but the indication of the sound wrong. The author of the *Liu Shu Ku* holds a similar view, pointing out that the *Shuo Wen's* definition and the sound attributed by Sun Shu-yen to

the character are irreconcilable. He also points out that in the *Shu King* the same character 亂, as it is now printed in the text of that work, is in several places used as meaning 治 *chih*, to govern, regulate (while, I may add, in others it is used for "disorder"). He says he is unable to imagine how the confusion came about. If we suppose the true sound of the character 亂 was *tz'ü*, not *luan*, then it may be used in this passage and elsewhere on the bones for its homophone 詞 *tz'ü*. However, I admit the equation is highly tentative.

140. Note the simpler old form of *sui*, year, harvest. It will be noticed that *shui*, water, floods, is here written in the normal *ku wên* form, and may appear to throw doubt on the equation of the second character in sentence No. 132 with *shui*, water.

141. The second character should be 亥, and its romanized sound *hai*. Also the character 及 *chi* has been omitted, and should stand fifth. This sentence and No. 140 are on the same bone.

142. I am not sure that my equation of the last character with 禍 *huo* is right. It seems possible that it is an ampler form of the last character in No. 126, which I believe to be 𠂔 *hsiung*.

I am specially pleased to have identified the fourth character. It had resisted solution for about fourteen years, simple as it looks, and easy as it perhaps seems to guess—when you know it. Lo Chên-yü, p. 21, includes it (in reversed shape) among the frequent but unknown forms. Liu T'ieh-yün, in the preface to his *T'ieh Yün Ts'ang Kuei*, had published a courageous theory that this character, and that with which it is most often found in this particular scription (viz. the fifth in this sentence), were to be read 虺父 *hui fu*, and meant "Serpent Father", which he surmised must have been a title of the Chief Diviner, though it has a more Satanic ring to me. But Lo Chên-yü has already identified the latter of

the two characters as 亡 *wu* (or *wang*), not-to-have, and I have at last equated the former with 有 *yu*, to have. It is, *in form*, probably a fuller variant of 又 *yu*, the right hand, which also occurs often on the bones as 又 and sometimes as 𠂔.

145. The last three characters might be rendered literally, "not that rain," with *ch'i* serving to emphasize the negative *pu*. But I think it quite possible that we should regard *ch'i* as being used for its homophone 期 *ch'i*, to expect, in which case we should translate "rain is not to be expected". So too in the next sentence below.

146. The oracle seems to have been bothered by the weather on the morning of the forecast, for immediately following the sentence translated it is repeated, but with the negative omitted. Perhaps they had not our meteorological formula, "Some rain in places. Cooler."

147. The variation in the usual formula from "ancestor so-and-so" to "father" is to be noticed. If we have to do, as seems most likely, with inquiries by or on behalf of reigning sovereigns, then the present sentence must relate to a son of one of the Shang dynasty rulers whose posthumous title ended with Ting. Perhaps, then, it was Ti I, who reigned 1191-54 B.C., whose father was T'ai Ting.

148. The third character has proved a most troublesome one. It constantly recurs on these relics, and appears to be, *per se*, what is now written 合 *ho*, to fit together, to join. From the contexts it seems to have a verbal force, and I have tentatively equated it with 給 *chi* (*kei* in Pekinese), to give.

The present passage is the full inscription on the back of a model cowrie. (These cowries are termed in these legends "lucky fish".) The first three characters here are on the right, the next three on the left side, and between them, in the middle line, are the last two, to be read, I suppose, separately.

150. On a model cowrie. The eleventh character is written here, and fairly often elsewhere on the bones, in this contracted form. I have not ventured to equate the thirteenth character with any modern form. But it is clear from the context that it must be a verb, and it would suit very well if it were some word meaning to make or carve. The sign itself might be either *two men* or, more likely, *two knives*. There is in Kanghsi a character 𠂔, read *tiao*, and defined by the Yü P'ien Dictionary as 斷取 *ts'ü*, to take by severing. The sense hardly applies and no quotation is given. If, however, this *tiao* is a variant of 𠂔 *tiao*, to chisel or engrave, we should have a very good sense for our character and could then read "the grandsons and sons carved (or engraved) a cowrie" as a record.

It is curious that we never find "one cowrie" written 一 魚 *i yü*, but always 乙 魚 *i yü*, though in the modern text I have used the common character to show the sense. See note to No. 8.

151. The character 賜 *ts'ü* has been accidentally omitted from the modern text on p. 58.

153. The original of the third character (omitted in the modern text) appears to be a very contracted form of 揚 *yang*, to exalt, to praise. Could 揚 給 *yang kei* mean "to present with honour"?

MISCELLANEOUS COMMUNICATIONS


LE NOM DES TURKS DANS L'AVESTA

Les chroniques du Céleste Empire racontent que le nom des Turks n'apparaît dans l'histoire du monde qu'en 552, alors que les tribus qui avaient survécu à l'écrasement des Huns renversèrent la puissance des Ibir (Jouen-jouen),¹

¹ 蠕蠕 "Jouen-jouen", anciennement *ib-ib* (cf. la prononciation annamite *ngép-ngép* de ces caractères) = *ibim* = *ibit* = *ibir*, les 伊 兒 de Rashid ed-Din, pluriel de *Ibi*, par *l* = *r* (cf. les Sien-pi des Chinois, qui sont les Sibir, lesquels ont donné leur nom à la Sibérie, et dont l'on trouve le nom écrit 伊 兒 dans la chronique de Rashid ed-Din). Le chef de ces Turks était Toumân, 土 門, qui épousa la fille du prince de Wei, et prit le titre de Il-khaghan (伊 利 可 汗 *i-li k'ho-han*), "le grand khaghan". Je ne sais pourquoi l'on a identifié Toumân avec le Boumin khaghan des inscriptions turques de l'Orkhon; jamais les Chinois, qui transcrivent les noms étrangers d'après un système très scientifique, et nullement au petit bonheur, n'auraient en l'idée de rendre le *l* de Toumân par un *h*. Le titre souverain, chez les peuplades de race turke, telles les Huns, était *tchabghou*, qui était turk, tandis que celui de *khaghan*, qui appartenait aux Ibir tonghouzes, était tonghouze, naturellement. On lit en effet dans l'histoire de la dynastie des Thang (édition primitive, chapitre 194a, p. 1) que, chez les Turks, le *khaghan* (*k'ho-han*) était le même chef que le *tan-yu* de l'antiquité, et que sa femme, la *k'ho-houo-touenn* (= *khaghatoun* = *khaghan-toun*), était la même que la *ngo-shen* des temps anciens; *tam-sen*, prononciation ancienne de *tan-yu*, représente *t(ch)abghou*, avec l'équivalence *w* = *g*, et l'alternance rare, mais possible de *g* et *gh* (cf. le tibétain *sen-gé* transcrivant le sanskrit *śiṇḍa*). Ce titre de *tchabghou* était celui des chefs des Huns, ancêtres des Turks (*Kang-mou*, *tch'ing-p'ien*, ch. 7, p. 107, année 1 de notre ère; ch. 17, p. 95, etc.). Les Sibir tonghouzes, dont la puissance avait commencé en 93 de notre ère (*Kang-mou*, ch. 10, p. 57), avaient pris le titre de *tchabghou* (*tan-yu*) parce qu'à leur époque, c'étaient les Huns turks qui possédaient l'hégémonie de l'Asie septentrionale, et, en 281, on voit un chef sibir, Mou-young-shé-kouei, recevoir du Fils du Ciel le titre de "tchabghou suprême" (*taï tan-yu*; *Kang-mou*, ch. 17, p. 13), ce qui montre que le titre de *tchabghou* eut, comme celui de *râdja*, rapidement besoin d'un amplificatif. En 402 de notre ère, Touloun, souverain des Jéou-jen, autre nom des Jouen-jouen = Ibir, ayant soumis tous les peuples, à l'Ouest, jusqu'au royaume de Yen-khi (Kharashar), à l'Est, jusqu'à la mer de Corée, abandonna le titre de *tchabghou*, et prit le titre tonghouze de *khaghan* (*Kang-mou*, ch. 23, p. 30), pour montrer au monde altaïque qu'il

qui les employaient dans les mines de l'Altaï à leur forger des armes de fer.

Le nom de Turk, ou tout au moins la racine dont il a été formé, existait à une époque bien antérieure au vi^e siècle de l'ère chrétienne. Thraëtaona, dans l'*Avesta*, a trois fils : Airiya (= Arya), qui reçut l'Iran en partage ; Sairima, qui devint le souverain de l'Occident, et Tura, qui fut maître de l'Orient. Il n'y a aucun doute que ce Tura, ancêtre de la race des Turks, qu'il est impossible de séparer de leur nom, ne soit avestique, car il paraît dans l'analyse du nask *Citradât*, telle que la donne le *Dînkart*.¹ Tuirya (= Turya), dans l'*Avesta*, paraît comme épithète des pays touraniens,² à côté des pays sâinis, c'est-à-dire de la Chine, du Tehinistân, comme la nomme le *Boundahishn* : *tûiryānām, sâininām, dâhinām dahyunām narām ashaonām fravashayō yazamaide*, "nous sacrifions aux fravashis des hommes saints des pays touraniens,³ chinois, des Dahya "⁴ c'est-à-dire, à n'en point douter, aux Mazdéens qui vivaient dans le pays turk, des marches de l'Iran aux frontières de la Chine, en Chine, et en Bactriane. Un certain Tûra est cité dans le *Yasht* xiii, 123, comme étant le père du saint Frârizi.⁵ Les "Dânu touraniens" paraissent à plusieurs reprises sous les espèces

substituait la puissance des tonghouzes à celle des peuples de race turke, et ce fut ce titre que Tournân prit en 552. Il est vraisemblable que le titre de tchabghou se retrouve dans le mongol *tchouboughou*, avec le changement de l'a initial en ou, sous l'influence de l'ou final : ce mot aujourd'hui signifie "agile, alerte" ; on y remarque la même évolution sémantique qui a amené le turc *tégin*  à ne plus signifier, dans le persan qui l'a emprunté, que "joli".

¹ Darmesteter, *Zend-Avesta*, tom. iii, p. lviii.

² *Yasht* xiii, 143.

³ *Yasht* xiii, 143.

⁴ *Yasht* xiii, 144. Les Dahia sont les Δάαι des Grecs, les Ta-hia des Chinois ; à l'époque de l'invasion des Scythes, ils occupaient la Bactriane (J. Darmesteter, *ibid.*, tom. ii, p. 554, note). Ils habitaient les pays à l'est de la mer Caspienne. Il est difficile de dater cette mention des Dahia, qui peut remonter depuis le vii^e siècle avant notre ère jusqu'au commencement de la souveraineté des Arsacides sur l'Iran.

⁵ Darmesteter, *ibid.*, tom. ii, p. 544.

d'ennemis malheureux des Iraniens : *khrīmao asēbish frasaiñti dānuñām baēvarepaitinām*, "sinistres sont les demeures dévastées des chefs de myriades des Dānu",¹ le mot *baēvare* étant très visiblement la traduction du terme *tumen*² "10,000," qui représente, comme chacun le sait, l'unité supérieure, le corps d'armée, des bords altaïques. Deux héros nommés Ashavazdah, et un troisième, nommé Thrīta, invoquent Ardvīsurā Anahīta pour qu'elle leur donne la victoire sur les chefs des "Dānu touraniens", *dānavō tāra*, Kara³ l'Asabana, Vara⁴ l'Asabana, et le très puissant Dūraēkaēta, ce cycle étant indépendant de celui de Vishtāspa, et certainement antérieur, sans que l'on puisse dire de combien, car Vishtāspa eut un songe dans lequel il vit l'âme de Thrīta.⁵ Afrasyab, l'ennemi acharné des Iraniens, est, dans le *Boundahishn*, qui copie le nask *Citrādāt* de l'*Avesta*, le descendant de Tūra, fils de Thraētaona, et l'*Avesta* lui décerne l'épithète flatteuse de "bandit touranien", *mairyo tuiryō*.⁶

On voit sans peine que la racine au moins du nom des Turks existait à l'époque à laquelle fut écrit l'*Avesta*, dont la rédaction, si bas qu'on la veuille placer, n'en reste pas moins infiniment antérieure au règne de Tōumân,

¹ Yasht xiii, 38.

² *Tumen* dans la prononciation du mongol moderne ; primitivement *toumân*, avec l'a très long tournant à l'e, tendant vers *tonmon* (門 = mon en japonais ; *mon*, dans les dialectes occidentaux, à l'époque mongole, comme l'indique la transcription tibétaine de ce caractère) ; *toumân*, *tomân*, encore au moyen âge (x-xiii^e siècle), comme l'indique assez la prononciation actuelle du persan *تومان*, qui transcrit ce mot altaïque. *Toumân*, *tomân*, est un emprunt très ancien au chinois 多 萬 *to-man*, "les dix mille".

³ Ce nom est le turk *kara*, le mongol *khara*, "noir," qui est très fréquent dans l'onomastique des Turks et des Mongols.

⁴ Probablement le nom qui est devenu *gueur* en turk-oriental گور, et qui signifie "adroit, rapide", puis "chef", d'où گورلک *gueurluk*, "objet ou homme auquel on accorde toute sa confiance", گورمک *gueurmek*, "reconnaître quelqu'un comme chef."

⁵ Yasht v, 73 ; Darmesteter, *Zend-Avesta*, tom. iii, p. 484.

⁶ Yasht v, 41 ; Yasht xix, 50.

à une époque à laquelle les Huns étaient les maîtres de l'Asie septentrionale.

E. BLOCHET.

MONGOL BOGHDO, "SAINT"

Le mongol *boghdo*, "saint," anciennement *bokhta*, entre dans la composition du titre que prit Témutchin, à l'imitation du nom posthume des Fils du Ciel, quand il se proclama souverain des Mongols: *soutou boghdo tchinkkiz khaghan*, "saint et éminent empereur des guerriers indomptables," ce qui traduit à peu près le titre chinois 顯聖武帝.

Boghdo est l'équivalent du mongol *khoutoukhtou*, qui traduit couramment le sanskrit चार्य et le chinois 聖 "saint"¹; dans le Vocabulaire ouïghour-chinois, *boghtas*, transcrit 卜答思 *pou-ta-seu*, pluriel mongol en -s du mot mongol *bokhta*,² est traduit 聖人 "homme saint".³

Ce mot *bokhta* est la transcription littérale du participe passif persan *bokhta*, du verbe *bokhtan*, "sauver, racheter

¹ "Saint" et non "sage". Ce sont les Missionnaires de la Compagnie de Jésus qui, par scrupule religieux, ont imaginé de traduire 聖 par "sage", pour ne pas appliquer l'épithète de "saint" à des hommes qui n'ont pas été illuminés par la vérité chrétienne. Il y a une nuance entre ces deux traductions, quoique la sagesse populaire fasse dire à Mahomet من عرف نفسه فقد عرف ربه. "Celui qui se connaît lui-même, par cela même, connaît son Seigneur".

² Ce mot *boghtas* est probablement une forme mongole empruntée par les Ouïghours, à l'époque mongole, avec le pluriel mongol en -s, comme il y en a d'autres exemples dans le Vocabulaire ouïghour-chinois. Mais il peut également être une très ancienne forme turke avec ce même pluriel en -s qui paraît dans les formations pronominales *biz*, *siz*; *boghtas* serait alors un pluriel de majesté, comme il semble que les Turks ont aimé à en former, tels les mots امرأ, توب, lesquels, à la cour des souverains turks de la lignée de Témour le boiteux qui ont régné sur l'Indoustan, ont éliminé du persan les singuliers باب, امر; dans ce cas, le pluriel arabe باب *abab*, que les Turks emploient à la place du singulier باب *bab*, "saint," est la traduction littérale et inconsciente du pluriel *boghtas*.

³ Dans l'exemplaire qu'il a envoyé à la Bibliothèque Royale, au dessous de 聖人, le Père Amiot a écrit "sanctus, sapientissimus", ce qui prouve qu'il y voyait un stade supérieur à celui du "sapiens".

des peines éternelles," dérivé de la racine *bhuj*, en sanskrit *mué*, dont la forme pehlie *bókhtak* se lit dans un texte cité par le Lexique zend-pehli, où il est parlé d'"un homme adulte et en état de grâce" *gabrâ-i pârnâg-i bókhtak*.¹ Le participe passif pehli primitif *bókht* figure dans ce même lexique comme traduction du zend *buji*.² C'est cette forme verbale que l'on trouve dans les noms chrétiens de Bokht-yéshou', بختيشوع "sauvé par Jésus", Sébokht, سبوح "sauvé par la Trinité", et c'est aux Chrétiens Nestoriens que les Mongols ont emprunté le mot persan *bokhta*, "saint," à une époque à laquelle la langue pehlie avait disparu pour laisser la place à l'idiome moderne.³

E. BLOCHET.

¹ An old zand-pahlavi glossary edited . . . by Destour Hoshengji Jamaspji . . . revised by Martin Haug, Stuttgart, 1867, p. 39.

² Ibid., p. 28. Le participe passif *bókht* est conservé en persan moderne sous la forme بخت qui est citée par le *Borhan-i katî* avec le sens de "fils"; c'est littéralement "celui qui est délivré de l'emprisonnement dans le sein maternel"; *bôchiak*, en pehli, signifie "délivrance, accouchement". En sanskrit, le participe passif *mukta*, de la racine *mué*, qui est *bhuj* en iranien, signifie, tout comme *bokhta*, "un saint qui a renoncé à toutes les contingences de ce bas monde et qui s'est préparé pour la délivrance du *samsara*." *Bokhta* et *mukta* n'en sont pas moins rigoureusement indépendants, et *bokhta* n'est pas un emprunt au sanskrit *mukta* qui eût donné en mongol, soit *makta*, soit *lokta*, mais pas *bokhta*, avec la gutturale aspirée. *Boghda* se trouve en chaghataï sous la forme بدها, qui n'a rien à voir avec le mongol *baghatour*, "héros." *Boghda* est essentiellement différent de *Boghdan* بدهان, qui entre dans la composition du nom du Boghdan Balkhan, en Bulgarie.

³ Le fait important est que *bokhta* a été emprunté au persan moderne, dont les formes s'étendent de la seconde moitié du ix^e siècle à l'époque actuelle, et non au pehli des Sassanides, qui fut en usage dans l'Iran du i^{er} au vii^e siècle. Le pehli des Sassanides persista dans l'Iran bien après la conquête musulmane: au vii^e siècle, l'arabe emprunta à la langue de la Perse des mots terminés par -g, qu'il transcrivit par le ج, qui se prononçait alors g, et dont la valeur dj est relativement moderne. Deux siècles plus tôt, ces mots se terminaient par un -k pur, comme on le voit par la transcription du nom du Khawarnak خوارنک, qui se trouve dans des textes du premier siècle avant l'hégire, mais qui représente une forme empruntée au v^e siècle, à l'époque de Yazdegerd, père de Bahram Gour. Ils dérivent de formes achéménides en -ka, et cette finale -g a complètement disparu dans le persan moderne, qui prononce *banda*, ce

THE POETRY OF MUTANABBI

The author of the note on the poetry of Mutanabbi (JRAS. 1915, Pt. I, p. 118) expresses the opinion that the passages selected and translated in my *Literary History of the Arabs* "are more calculated to reveal the side of his poetry which is repulsive to Western readers than to suggest that, after making allowances for great differences in taste, Mutanabbi is really entitled to a high place among the poets of the East". This may or may not be so—anyhow, it is quite a fair view to take, but in the interests of sound criticism I think some protest should be made against his implicit assumption that he can display the genius of Mutanabbi in a truer light by translating twenty verses picked from various odes in the *Diwân*. While the examples chosen illustrate the poet's wit, ingenuity, and terse felicity of phrase in

qui se prononçait *bandag* à l'époque de la conquête, le pehlvi *bandak*, l'achéménide *bandaka*. Il est difficile, faute de documents datés, de déterminer d'une façon absolument précise l'époque de la chute de ce -g, qui est la caractéristique du passage du pehlvi au persan moderne. Il n'en est pas moins certain qu'à l'aube de l'époque classique, ce changement était radicalement opéré, car on ne trouve aucune trace de ces formes en -g, ni dans Roudégi, qui mourut en 329 de l'hégire, ni dans la traduction de la chronique de Tabari, laquelle date de 352 de la même ère. Si l'on remarque qu'il y a une différence de deux siècles entre les formes en -k, comme *Khawarnak*, et celles en -g, comme *bandag*, que, de plus, la morphologie du pehlvi s'est conservée si longtemps intacte qu'Attar, au xii^e siècle, emploie dans son *Tazkérat el-auliya* des formes verbales qui sont du pehlvi pur, on est tenté de placer, d'une façon approximative, car rien ne saurait remplacer l'existence d'une série de documents datés, vers le milieu du iii^e siècle de l'hégire, c'est-à-dire dans la seconde moitié du ix^e siècle de notre ère, l'époque de la disparition totale du -g terminant les mots persans, qui dérivait du suffixe achéménide -ka. Il en résulte que les documents manichéens qui ont été trouvés en Asie centrale, et dans lesquels on remarque des mots qui se seraient terminés par -k en pehlvi, en -g, vers l'époque de la conquête, comme *firishtag* "ange", mais qui se terminent en -a, avec la chute totale du -k, tel *firishka*, qui paraît dans ces fragments, reposent non sur des textes pehlvis, mais bien sur des textes en persan moderne, postérieurs à l'année 850, ce qui est un fait qui ne manque point d'une certaine importance pour la détermination de la date des monuments découverts dans les cités en ruines du Turkestan chinois.

a form which English readers will hardly recognize as poetical, his most characteristic qualities are either not exhibited at all or are contemptibly dwarfed by the method which Mr. Dewhurst has adopted. Mutanabbi is especially unsuited for such microscopic valuation, because an anthology of single lines reduces great merits and great faults to one level of littleness. In the book referred to above I have called attention to the masculine vigour of his verse, the sweep and splendour of his rhetoric, the luxuriance and reckless audacity of his imagination. Surely these are the grand features of his style that entitle him to "a high place among the poets of the East" and justify his reputation in the eyes of European critics. His pearls of wit and wisdom, though excellent of their kind, do not make him the great poet that he is, nor would their absence profoundly affect our judgment concerning him.

REYNOLD A. NICHOLSON.

NOTES ON THE AVESTA

Yasna XII, 9. *Āstuyē daēnām Māzdayasnīm fraspad-yaokhedhrām nidhāsnaithishem*. This is rendered by Dr. Mills (Sacred Books of the East, vol. xxxi, p. 250) "I praise the Faith of Mazda, the Faith which has no faltering utterance, the Faith which wields the felling halbert". The adjective *nidhāsnaithishem* means, however, "having put aside weapons," i.e. peaceable, and this is a much more appropriate epithet for a religion which has never prided itself on being propagated by the aid of the sword.

In the same verse the word *būshyēintināmcā* is rendered "of all that shall in future come to knowledge", which seems an unnecessarily lengthy and not quite accurate equivalent of a word which is simply the genitive plural of the future participle of the verb *bu*

(to be), *vide* Jackson's Avesta Grammar, p. 187. The words *háitināmeā būshylintināmeā* may be simply rendered "existing and future".

Yasna XXX, 2. The second line of this stanza, *Avaēnatā sūcā manuphā*, is translated by Dr. Mills "See ye the bright flames with the (eyes of the) Better Mind". It is difficult to understand how the translator got this idea of flames out of the Avestic text, and neither the Pahlavi rendering nor Neryosangh's Sanskrit paraphrase suggests anything of the kind. The word *sūcā* is clearly the instrumental case of an adjective qualifying *mamanha*, and the line simply means "See ye with a clear (or bright) understanding".

Yasht XVII, 19. Darmesteter (S.B.E., vol. xxiii, p. 275) renders *Raēkō me hacā auhāo zemat vanhō kerenaoiti* by "He makes it better for me that I should leave this earth". The word *raēkō* is, however, the accusative singular of the neuter noun *raēkānh*, meaning a furnace or forge, and the passage means "He makes a furnace better for me than this earth", i.e. Angra Mainyu says of Zarathushtra that he makes his life so intolerable that living in a furnace would be preferable to life in such conditions.

Yasna LX, 5. Dr. Mills takes the words *asha drujem* as a nominative and accusative and understands *vainīt* (let conquer) along with them. It seems more natural to take *asha drujem* to be a compound adjective in agreement with *vācim*, and to render the last words of the verse "Let truthful speech overcome falsely spoken words, which violate righteousness".

Yasna XLV, 8. This stanza begins with the lines—

*Tēm nē staotaish nemanhō ā vīvareshō
Nū zīt cashmaini vyādaresem.*

This is translated (SBE. xxxi, 128) "Him in our hymns of homage and of praise would I faithfully serve,

for now with mine eye I see him clearly". A more correct rendering would be "Him in our praises of homage I desire to serve, for I have now beheld him in my eye". *Vivaresho* is a desiderative formation from *varez* (to work), of the same kind as *mimaghzhō* (from *manj*, desiring to magnify), which occurs in the next stanza but one in the same hymn (*vide* Jackson's Grammar, p. 193). *Vyadareshem* is not the present but the imperfect tense, from the root *darez*, with the two prefixes *vi* and *ā* before it.

Yasna XLV, 1. The last two lines of this stanza are as follows:—

Nōit daibitīm dush-sastish ahūm merāshyāt
Akā varanā dregvōdo hizvōdo āveretō.

In the second line Dr. Mills reads *hizvā*. I have not got Geldner's text available for reference, but it would appear from Kanga's very useful Avesta dictionary (p. 588) that *hizvā* is the reading adopted in it.

The first of these lines presents no difficulty. *Daibitīm* is an adverb, and not an adjective qualifying *ahūm* (which is not feminine). The rendering given by Professor Jackson in his *Persia, Past and Present* (p. 65), viz. "Nevermore shall he, vile Teacher, the world destroy", is much nearer the literal sense of the words ("Let not the evil teacher again destroy the world") than that given at p. xxxiv of his Grammar, viz. "Nor let the wicked teacher your second life destroy".

The second line, however, is much more troublesome. Dr. Mills originally seems (*vide Study of the Gathas*, p. 219) to have preferred to take *āveretō* in the sense of professing, and he then rendered the line "Nor infidel evil creed loudly profess", but in the Sacred Books of the East his version is "The wicked is hemmed in with his faith and his tongue". Professor Jackson

has also given two different renderings of the line, the earlier one being, "The perverted sinner your tongues with his false faith," and the later, "Wicked Avower, he, of a sinful faith with his tongue."

The words *akā* and *varanā* are both clearly in the instrumental case and agree together, meaning "with a wicked belief". *Dregvā* is the nominative singular of the adjective *dregvant* (*vide* Jackson's Grammar, p. 86), meaning demoniacal or irreligious. *Hizvā* would be the instrumental singular of *hizvā* (tongue), whereas *hizvā* would be the genitive of *hizu*, a noun of the same meaning. *Āvaretō* is a nominative noun or adjective, derived from the root *varet* (*vertere*, to turn). The whole line seems, therefore, to mean literally, "The pervert with his wicked faith, irreligious of tongue."

R. P. DEWHURST, I.C.S.

THE TAXILA SCROLL OF THE YEAR 136

In Sir J. H. Marshall's case, as set out in his second paper at p. 191 ff. above, about the translation and bearing of the dates of this record and the plate of the year 78, only one point presents itself to me as calling for notice.¹ He has suggested (p. 195) that the writers of the Kharōshthī records of Taxila may have used modes of expression differing from those of the writers of the Brāhmī records of the same period at Mathurā and other places. But the Kharōshthī records are Indian records, written in an Indian dialect and character, and framed by Indians, just like the Brāhmī records. Every line of them shows that they are subject to just the same principles of construction and interpretation with the Brāhmī records. And

¹ I do not propose to write anything more at present on the general question, the date of Kanishka. That matter is one which must be decided, not by argument or constructive evidence, but by the clear showing of some inscription which will be conclusive one way or the other; and this, it is hoped, may be found ere long, as a result of the explorations which are being made.

the obvious meaning of the dates in the Brāhmi records is a sure guide, no matter what may be the exact order of the words, to the understanding of similar entries in the Kharōshthī records.

By way, however, of a supplement to what I have said in my previous paper,¹ I must make a few more remarks about the wording of the two dates, and for that purpose must give the clauses themselves again.

The Taxila plate of the year 78

There is no question here about the reading: it runs:—

samvachharaye aṭhasatatimae 78 maharayasa maham-
tasa mogasa panemasa masasa divase panichame 5.

Here, the word *mogasa* is shown plainly to be the genitive singular of a name Moga, partly by the royal titles which stand before it in apposition to it, and partly by the next word being clearly recognizable as the name of a month and so not giving another title or a name.

I take the position of the word *mogasa*, with its titles,—namely, after the statement of the year and before that of the month, etc., instead of before the year, or after the whole date with some such word as *rajami* to govern it,—as intentional, with a view to making it dependent on what follows it. I therefore translate the clause thus:—

“In the seventy-eighth year, 78; on the fifth day, 5,
of the month Panēma of the great king, the
great one, Moga.”

And I take the clause as showing, not simply that Moga was reigning in the year 78, but probably also that he began to reign in that same year.²

Professor Bühler, however, took *mogasa* as dependent on what stands before the titles, and translated thus:³—

¹ JRAS, 1914, p. 992.

² See my remarks in JRAS, 1907, p. 1014. I ought perhaps to have repeated them in my previous paper on the record of the year 136.

³ *Epi. Ind.*, vol. 4, p. 56.

"In the seventy-eighth year—78—of the great king,
great Mōga, on the 5th—5—day of the month
Panēma."

But the position on the main point remains the same: on the analogy of the dating of all the early Indian records, the record is not dated in the year 78 of an era founded by Moga, but is dated, and places him, in the year 78 of an unspecified era founded by someone else. This was seen plainly by Professor Bühler, who added the remark:—"The year 78 is, of course, not that of the reign of Mōga, but of the era which he used," and cited for comparison the inscription of Rudradāman which I have quoted (with others) in my previous paper. And I feel sure that, even if there should be just now any inclination in any quarters to endorse the understanding of it otherwise, a careful consideration of the early inscriptions in general will destroy it.

The Taxila scroll of the year 136

The troublesome word here is that one which stands next after the figures of the year. The later reproduction, however, fig. 1 in the Plate at p. 192 above, makes it clear, as claimed by Sir J. H. Marshall, that the word is *ayasa*: and it does not seem necessary to say anything more as to what else might be found in the place of that.¹ Accordingly, the text here runs:—

sa 136 ayasa ashadasa masasa divase 15.

¹ Sir J. H. Marshall, indeed, has suggested (p. 193) that it might be urged that the scribe wrote what he did not intend to write. In support of such a claim, it could be pointed out that the record certainly has some strange mistakes; for instance, in line 2 there seems to be an omission of the vowel *e*, so that we have *putram* (gen. plur.) instead of *putrem* (instr. sing.); in line 3 the *la* of *Tachhastila* has certainly been omitted; so also in line 4 the *ta* of *sareu-sateana* was omitted; and in line 5 there is an omission of the *da* of *satohidana*, if that was the intended word. With such instances before us, we might quite reasonably find here, too, some important omission or other mistake. But we will accept the word as it actually stands.

The only question is: what is the meaning of the word *ayasa*?

Sir J. H. Marshall claims that, because this word has the same position as that held by the word *mogasa* in the record of the year 78, therefore it must be the genitive singular of a proper name, and must mean "of Aya".

Even if that were the case, the record would still not set up an era of Aya and be dated in the year 136 of such an era. On the analogy of everything that is taught by the dating of the early Indian records, it would be dated, and would place Aya himself, in the year 136 of an unspecified era founded by someone else.

But, to the acceptance of this word as giving a proper name, there is an obstacle which has been recognized by Sir J. H. Marshall himself;¹ namely, that no titles of any kind are attached to it. And on the analogy here, again, of all the early Indian records, this itself, even apart from other considerations, is a fatal objection:² not in the Kharōṣṭhī, any more than in the Brāhmī records, do we ever find a king mentioned without a plain indication of his rank.

The word *ayasa* does not mean here "of Aya". The record does not set up an era of Aya. And no amount of special pleading can establish any such view.

As to what the word really does mean, I do not hesitate to say now, on the strength of the forms *aammi* and *ayam̐si*, = *asm̐in*,³ that it must be an equivalent of *asya*, 'of this'. Accordingly, the record says:—

"In the year 136: on the day 15 of this *present* month Āshāḍha:—"

¹ JRAS, 1914, p. 976.

² See fully my remarks in JRAS, 1914, p. 997.

³ Pischel, *Grammatik der Prākṛit-Sprachen*, § 429. I had overlooked these forms when I wrote my previous paper. Pischel has referred them to the stem *idam*; in preference to *idam* according to the Indian grammarians.

Or, with *vasasa* = *varshasya* understood :—

"In the year 136: on the day 15 of the month
Āshāḍha of this year."

Either rendering is acceptable: but there is, I think,
a preference in favour of the second one.

J. F. FLEET.

THE DATE OF THE RAMAYANA

The arguments of Professor Jacobi¹ on the date of the *Rāmāyaṇa* are of the greatest value and importance, and it is therefore of interest after a lapse of over twenty years to consider to what extent their validity can be accepted.

1. The conclusion from language² is that the epic must have been written in a period before a Prākṛit was the popular form of speech in the country, Oudh, in which the epic in its kernel was produced. Now by Aśoka's time, and probably in the Buddha's time, a Prākṛit was there the popular speech, and thus the epic may be held to belong to the sixth century B.C. The epic language is, indeed, of a more recent type than the Bhāṣā of Pāṇini; that fact is not, however, a sign of a date later than Pāṇini, but proves that the epic was the speech of a class outside the Śiṣṭas, to whom the *Mahābhāṣya* ascribes the norm of Sanskrit proper. This fact explains why Pāṇini ignored the epic language: it did not conform to the speech of the Śiṣṭas, and on the other hand it was not, like the speech of the Brāhmaṇas, an older form of that speech.

This is by far the most effective argument for the early date of the epic speech. It is useless to see archaisms proper in the *Rāmāyaṇa*, as I have sought to show elsewhere.³ The epic speech is undoubtedly in a more

¹ *Das Rāmāyaṇa, Geschichte und Inhalt* (Bonn, 1893). The arguments are accepted with some modification by Professor Macdonell, *Sanskrit Literature*, pp. 305 seqq.

² pp. 112-19.

³ JRAS. 1910, pp. 1321 seqq.; contra Michelson, *ibid.* 1911, pp. 169 seqq. Cf. Bohtlingk, ZDMG. xliii, 59 seqq.; Jacobi, pp. 5 seqq.

advanced stage of development than Pāṇini's Bhāṣā, but it is a perfectly reasonable view that it could be contemporaneous with it and represent the speech of a different class of the population. This is perfectly in harmony with the general facts of the differentiation of class in India, and it has a very striking support in the soliloquy of Hanumant when he deliberates¹ whether to address Sītā in speech which is *mānuṣī* and *saṁskṛtā* or to speak in *saṁskṛtā* speech *dvijātir iva*. It is impossible to avoid the conclusion that here we have a plain contrast between the Sanskrit of men generally and of the Śiṣṭas; both are expressly called *saṁskṛtā*, and therefore it is impossible to see in the first a Prākṛit speech, nor is such a speech ever mentioned in the epic. Moreover, the view that epic Sanskrit and Prākṛit developed independently and that the first is not a remodelling of the second is supported by Jacobi's acute observation that Pāli uses the aorist frequently, the perfect seldom, as a narrative tense, epic Sanskrit uses the perfect frequently and the aorist rarely.

As an argument for the date of the *Rāmāyaṇa* itself, there is less to be said for the argument, unless we accept the view that the epic speech largely owed its fixation to Vālmiki's work. For that there seems no reasonable evidence, and while this is the case it must be admitted that we are left to conjecture at how late a date the epic speech could be used for the composition of an epic with claims to popularity.² This depends on factors which we have no materials to estimate. To what degree of

¹ v. 30. 17, 18.

² See Jacobi, pp. 62-3, and cf. Hertel, *Tantrākhyāyika*, pp. 8 seqq.; Thomas, JRAS. 1910, pp. 972-3. It must be remembered that the Vedic period had a contemporaneous literature of a popular character, though little of it is preserved in the texts. There is a fragment of it in a verse preserved in KB. xxvii, 1, which has escaped the notice of Lindner, of Aufrecht (ZDMG. xxxiv, 175-6), and the *Vedic Concordance* alike, and which contains the form *yāmaki*, clearly of popular character.

popularity did the poem really aim? How far could the several classes understand Sanskrit even when they did not speak it? How far were those who did not speak or understand Sanskrit able to enjoy it on the strength of explanations given in vernacular? To these questions, which could easily be multiplied, we have no means of replying, and the most that seems reasonable is to say that such an epic as the *Rāmāyaṇa* was more probably composed a century before than a century after the period of Aśoka, in the literary language of the Kṣatriya class. With this date, the fourth century B.C., accords adequately the fact that Pāṇini does not happen to cite the name of a personage of the *Rāmāyaṇa*, as he would very possibly have done had the great work of Vālmiki existed. It must be remembered that several of the personages of the *Mahābhārata* appear in Pāṇini.

On the other hand, it is really inconceivable that after Pāṇini's influence had spread the epic language should have been created as a mode of rendering a story originally framed in Prākṛit. What did happen with the spread of his authority was that the Kāvya poets refined the epic language by throwing aside its irregularities and conforming in the main to Pāṇini's rules, though they show their historical connexion with the epic by their use of the narrative perfect irrespective of Pāṇini's restriction, and by occasional deviations from his norms which can be traced in the epic. Moreover, the evidence which has steadily accumulated for the early age of the Kāvya literature is a decided argument against any attempt to date the *Rāmāyaṇa* in the first century B.C. Despite the fact that the *Rāmāyaṇa* has characteristics which anticipate the Kāvya style,¹ there is a very real difference between the style of that poem and the style of Aśvaghoṣa's *Buddhacarita*, and the later work is

¹ See Jacobi, pp. 119-27.

admittedly and clearly a court epic as contrasted with a work with a more popular appeal.

2. From the metre as compared with that of the Pāli texts it is impossible to derive any clear argument. That the śloka in Vālmiki is a better and more regular verse than the Buddhist śloka is perfectly true, but apart from Jacobi's¹ arguments from the incorrectness of Buddhist texts, the carelessness of composers of non-literary works, the use in Pāli of the Āryā metre, and the difficulty of adopting the language to the metre, it is impossible to hold that any relation of time can be deduced from the metres of works in different languages, when these metres are of a definite type which can easily be imitated. Moreover, we know that works like the *Bṛhaddevatā* and the *R̥gvidhāna*, which belong to the fourth century B.C.,² show a similar form of metre to the epic, and we are therefore entitled to say that the epic metre points to a period about that date.

3. Stress is laid by Jacobi³ on the fact that Pāṭaliputra is never mentioned in the epic, and yet by Megasthenes' time it was the chief city of India, and it was founded by Ajātaśatru's son or grandson, Kālāśoka. The force of this argument rests on the fact that the epic mentions other places where the fame of the epic spread, such as Kauśāmbi, Kānyakubja, Girivraja, Dharmāranya, and Kāmpilya, but passes over Pāṭaliputra. We have, however, no proof of the greatness of the town before the Maurya period, and therefore this argument only aids us to a date in the fourth century B.C. The same conclusion can be derived from the further consideration that the poet ignores the existence of any great empire, and apparently must have flourished before the foundation of

¹ Jacobi, p. 93.

² See Macdonell, *Bṛhaddevatā*, i, pp. xxii-iv; Keith, JRAS. 1912, pp. 769 seqq.

³ pp. 101-4.

the power of Magadha, which is reflected in the *Mahābhārata* account of Jarāsandha. But it is impossible to carry the date further back by any argument based on the omission of any mention of Śrāvastī, which was in the Buddha's time the capital of Prasenajit, or the mention of Mithilā and Viśālā as two separate states. Still less is it important that in the fifth century B.C. the Ikṣvāku power was in decay and the poet wrote his preface in i, 5 at a time when the Ikṣvāku race was at its height of power. There is nothing here that a poet could not legitimately produce or omit even if he wrote in the fourth century B.C. The only part of the argument which is of real weight is the apparent ignorance by the poet of an Indian empire of Magadha and its capital.

4. Sati is practically not referred to in the kernel of the epic; it flourished with official recognition in Magadha in Megasthenes' time, and it is perfectly fair therefore to hold that this fact is an argument of some slight weight in favour of a date before the third century B.C. But we cannot take this as proof of a sixth century date.

5. Stress is laid by Jacobi¹ on two astronomical arguments, according to the first² of which Puṣya was in the sky from the beginning to the end of the night at the winter solstice, i.e. in the seventh century B.C.; while according to the second² the poet must have seen a total eclipse of the sun, probably in the sixth (546, 548, or 574 B.C.) or eighth century B.C. (719, 794 B.C.). Neither of these arguments can be taken as a serious contribution to the question. The first depends on the meaning of *Puṣya-nīlāḥ*, and on the theory that the notice cannot be a traditional one, while the second is based on the gratuitous assumption that only a total eclipse could explain the description.

¹ pp. 108-12.

Rāmāyaṇa, iii, 16, 12.

² *Ibid.* iii, 23, 12 seqq.

These arguments so far go, not to prove a date before the sixth century B.C., as Jacobi holds, but a probable date in the fourth century B.C., and it is worth considering what can be said against such a date. (1) The term Yavana is actually found in i, 54 and iv, 40, but both passages are for quite other reasons clearly not parts of the kernel of the text.¹ There is therefore reason to regard the absence of any reference to the Greeks as bearing out the main thesis of a comparatively early date.

(2) The *Daśaratha Jātaka* contains a verse which deserves consideration ; it runs—

*daśa vassasahassāni saṭṭhiṃ vassasatāni ca
kambugīvo mahābāhū Rāmo rājyam akārayi,*

and must be compared with the *Rāmāyaṇa*, vi, 128 :

*daśa varṣasahasrāṇi daśa varṣasatāni ca
bhrātṛbhiḥ sahitaḥ śrīmān*² *Rāmo rājyam akārayat.*

Jacobi concludes that the epic is the source of the Pāli verse, while the opposite theory has been equally maintained.³ The *Jātaka* itself doubtless is an attempt to turn the Rāma story to pious purposes, and it cannot be held to be an older version or source of the *Rāmāyaṇa*. On the other hand, the diversity of the verses and the variants of the epic verse point to both using an older verse of the same traditional type as those of which specimens in Sanskrit are preserved to us in the *Aitareya Brāhmaṇa* and the *Śatapatha Brāhmaṇa*, as said of great kings. Therefore the *Jātaka* of unknown date throws no light on the epic.

(3) Nothing can be made out of the relation of the *Rāmāyaṇa* to Buddhism. On the argument of Hopkins,⁴

¹ Jacobi, pp. 37 seqq., 50 seqq.

² It is important to note that the first half of the second line is variously read (*ellatākubhayaḥkrodho* and *evamguṇasamāyukto*) and that the line appears at i, l. 97 in a changed form.

³ Lüders (GN. 1897, pp. 126 seqq.), who argues for a Prākṛit original form for the old verses in such cases.

⁴ *Great Epic of India*, p. 399.

in the case of the *Mahābhārata*, if the epic were an attack on Buddhism, it could not well have been produced in Kosala before the second century B.C. But that it contains such an attack is most improbable, and the only reference to Buddha is clearly a late interpolation, probably of the second century B.C. or still later.

(4) The question of Lankā is difficult. Was it Ceylon, and was Ceylon so called in the sixth century B.C. and known to a poet in Kosala? The evidence that Lankā was Ceylon is extremely weak: the oldest names for the island are Tāmrāparṇī and Sīṃhala, and it is difficult to resist the conclusion that the identification of the more or less mythical Lankā with Ceylon is the product of the spread of the poem as Jacobi has argued.¹ It is perfectly clear that the conquest of the south, as Lassen² suggested, or the spread of Aryan civilization, as Weber³ thought, is not the kernel of the epic, and Jacobi's explanation⁴ of the underlying myth of Rāma, Sītā, and Hanuman is the most convincing yet offered. With it disappears any ground for holding that the mention of Ceylon is natural, and the poet's extremely vague view of the south as suggested by his references tell in favour of an early date.

(5) The relation of the *Rāmāyaṇa* in metre to the *Mahābhārata* has been elaborately considered by Hopkins,⁵ who finds in the *Rāmāyaṇa* not merely a more refined type of śloka than that of the *Mahābhārata*, a fact which would naturally be ascribed to mere individual ability and taste, but also a later type, equivalent to that of the pseudo-epic. He proceeds to date the pseudo-epic type and that of the epic generally as not before the second century B.C., because the *Mahābhāṣya* quotes from an epic source verses which deviate far more than any *Mahābhārata* verses from the norm of the śloka, viz. in having the first and third Pādas ending in — — and

¹ pp. 90-3.

² *Ind. Alt.* i, 535.

³ *Ind. Lit.* p. 192.

⁴ pp. 130 seqq.

⁵ *Op. cit.* pp. 238-9.

— — — respectively, and in having a final Pāda in
 — — —. The reasoning is surely an impossible one,
 for apart from the fact that the *Mahābhāṣya* also knows
 perfectly regular verses of epic type,¹ there is not the
 slightest evidence that the verses are typical of the second
 century B.C. There is nothing to suggest that the verses are
 verses made by the author of the *Mahābhāṣya*, or that they
 represent the contemporaneous stage of epic versification,
 and once that is conceded, as it must be, no argument of date
 can possibly be drawn. The real argument is a different
 one: the verse of the epic is a freer verse than that of the
 classical poetry and a stricter verse than that of the
 Upaniṣads, and of the two epics the *Rāmāyaṇa* shows
 a greater limitation in the use of the Vipulās. From the
 latter fact the posteriority of the *Rāmāyaṇa* cannot
 safely be deduced, because it is the work of an individual
 of great ability, and we cannot even say that the *Rāmā-*
yaṇa must be later than the Upaniṣad ślokas, since the
 epic is not the work of the same hands or school as the
 Upaniṣads. To get a positive date, we are reduced
 to seeking some works of approximately similar metre
 which can on other grounds be dated, and as already
 mentioned the nearest parallels are such texts as the
*Bṛhaddevatā*² and *Rgvidhāna*. These texts can reason-
 ably be compared with the epic because their contents in
 part belong to the epic tradition, and they yield us the
 reasonable view that the epic might be, as far as metre is
 concerned, of the fourth century. It is true that the
Bṛhaddevatā is possibly somewhat older in form than the
 epic,³ but there is no such distinction as can enable us to
 deny the possibility of a similar date. But it should be
 emphasized that the metrical evidence is not convincing
 proof of date, as once a general norm of the śloka was
 arrived at in the fourth or third century B.C. that

¹ *Great Epic of India*, p. 472.

² Keith, *JRAS*, 1906, pp. 1 seqq.

³ See Oldenberg, *GN*, 1909, p. 234.

norm might be observed for many years after. Even then, if we accept the theory¹ that the Pāṇḍu epic could not be written until the fall of the Buddhist kingdom in the second century B.C., the fact that the metre of that epic is on the whole rather less accurate and more archaic than that of the *Rāmāyaṇa* cannot be used as an argument for the date of the *Rāmāyaṇa* in the second century B.C. or later. There is nothing in the least improbable in a poet like Vālmiki adopting a refined form of śloka while the more careless form lasted on for many generations thereafter.

The general relation of the two epics² shows nothing to contradict this view; the *Rāmāyaṇa* is clearly known to the later *Mahābhārata*, while the addenda to the former poem recognize the *Mahābhārata*. Again, the *Rāmāyaṇa* knows the Kuru story, but not anywhere the Pāṇḍus. The Pāṇḍus are known at soonest to Pāṇini, as he mentions Yudhiṣṭhira, and in this fact as contrasted with the silence of the *Rāmāyaṇa* we have a support for a fourth century date for that epic, even allowing for difference of place between Pāṇini and the *Rāmāyaṇa*.

(6) No argument against this date can be derived from the identification of Rāma with Viṣṇu, for this is clearly a later part of the epic. In the main body of the work the great god is rather Indra,³ a fact which points partly to an early dating and partly to the fact that the *Rāmāyaṇa* represents the religious views of the Kṣatriya rather than of the priestly class.

(7) No stress can be laid on the mention of the King of Aṅga in the R̥ṣyaśr̥ṅga episode (i, 9-11) as connected with Daśaratha. Jacobi,⁴ indeed, concludes from it that, as Aṅga as a kingdom fell a victim to the advance of Magadha, no poet would have inserted this detail of the contemporaneity of the Aṅga king with Daśaratha after

¹ Hopkins, op. cit. p. 399.

² Ibid. pp. 60 seqq.

³ Jacobi, p. 138, n. 1.

⁴ p. 101.

the fall of the kingdom. But the episode is a late one, far from primitive,¹ and it might just as well be argued that the connexion of the kings was made in the second century B.C. when the fall of Magadha allowed Aṅga to revive its power.

(8) If Janaka of Videha could be dated, as suggested by Professor Hoernle,² about 500 B.C. as a contemporary of Ajātaśatru, then the date before 500 B.C. suggested by Jacobi would be at once disposed of. But this identification of Ajātaśatru of the Upaniṣads with the Buddhist Ajātasattu cannot possibly be held to be correct.³

On the whole, therefore, it appears to me that while the date before 500 B.C. cannot well be maintained, there is no reason to go below a date before 300 B.C. for the kernel of the *Rāmāyaṇa*. With this date all the evidence accommodates itself fairly easily and naturally, and there is removed one difficulty which interferes with the acceptance of Jacobi's theory. He lays just stress on the probability that the *Mahābhārata* was in large measure redacted in the Pāṇḍu interest by poets, after the writing of the *Rāmāyaṇa*, under the influence of that poem, and he gives as the place of this redaction Pāṇḍala, where the Pāṇḍu family was clearly popular. This is a very reasonable theory, and with the fourth century date suggested fits in well with Hopkins's suggested date of 400-200 B.C. for the first Pāṇḍu version of the epic. It is no real objection to this that the *Mahābhārata* metre remains freer in its earlier portions even in the redaction preserved (after 200 B.C.) than in the *Rāmāyaṇa*. The metrical form of the latter poem is due to the unity of its authorship, that of the former to the diversity and to the absence of the hand of one author of genius, who introduced a more refined and elegant style of metre.

¹ Lüders, GN. 1897, pp. 104 seqq.

² Keith, ZDMG. lxii, 138, 139.

³ *Osteology*, p. 106.

Of the final date of the completion of the *Rāmāyaṇa* with the first and seventh books nothing definite can be said, except that the mention of Yavanas and general probabilities suggest that the second century B.C. saw most of the work complete, as was also the case (in the view of Hopkins) with the *Mahābhārata*.

A. BERRIEDALE KEITH.

THE DYNASTIES OF THE KALI AGE

Mr. Pargiter's note in the last number of the *Journal* (pp. 141-7) on the Purāṇic account of the dynasties of the Kali age asks for certain information, which I shall attempt to give with as much brevity as is possible.

1. *Bhaviṣye kathitān* has precisely the same sense as the *v.l.* of various MSS. (above, 1914, p. 1023), *bhaviṣyān*; the kings are told of as *future* kings or told of as kings *in the future*. I take the obvious view that *bhaviṣye* and *bhaviṣyān* have the same sense as in *bhaviṣyā ye nṛpās tathā*. Mr. Pargiter has to emend *bhaviṣyān* to avoid this obvious conclusion, which is in truth fatal to his theory.

2. Mr. Pargiter (pp. 142, 147) asks when the dynastic account was compiled, whence came the material and in what shape it existed, and what the author did with it when he composed the prophetic account which is found in the Purāṇas. To these questions I have no answer to give; Mr. Pargiter, who calls them "elementary questions", has attempted an answer, and my purpose in the paper to which his note is a reply was to show that the evidence on which he bases that answer is wholly insufficient to justify his conclusions. That there was a common source for the dynastic account in the Purāṇas is common property and has for years been so. Mr. Pargiter's contribution to the argument is a detailed

theory of versions and dates (1914, p. 1022), the first part of which, the derivation of the list from the *Bhaviṣya*, rests on the evidence dealt with in the last paragraph.

3. In the *Vāyu* and the *Brahmāṇḍa Purāṇas* Mr. Pargiter insists that the phrase *bhaviṣya(j)-jñaiḥ* must mean "men who know the *Bhaviṣya Purāṇa*", and not "men who know the future", because in effect the *Sūtra* could only quote as his authority Vyāsa and not others who had the knowledge from him. The *Matsya* has *viprair gītaḥ purāṇaiḥ*, which obviously proves the contrary and shows that it was sufficient to quote sages, and that therefore *bhaviṣyajñaiḥ* merely means "men who know the future". Mr. Pargiter's argument (p. 142) is indeed incomprehensible to me, unless he considers that *udāhṛtaḥ* and *gītaḥ* can be distinguished as meaning "enunciated for the first time" and "repeated from older tradition" respectively, and such a distinction can certainly not be shown to exist.

4. As regards the question of dates (pp. 142-4), Mr. Pargiter objects to my calling his theory of reading numerals a wild conjecture, and considers it pointless to show that his results are not acceptable even to Mr. Vincent Smith, who treats his work with greater faith than can I. He also, incorrectly, accuses me of suppressing the fact that he said that "the line" about the Tuṣāras was corrupt; I expressly said (1914, p. 1026) "correcting the *Matsya*", words doubtless overlooked by Mr. Pargiter. The conjecture is wild, because it has no warrant in grammar or probability, and it cannot be too clearly realized that the introduction of theories of this kind into serious discussion is merely to distract attention from the seeking of solutions which rest on solid foundations. Anything can be proved by emending texts and inventing new meanings. Again, we are told that the line about Yajñaśrī reigning for nine years in five MSS. of the *Matsya* must be a contemporary reference. To

this I have replied that the present may be prophetic, and have actually quoted a parallel prophetic present in another case in the same text, and Mr. Pargiter, who I presume cannot deny the prophetic use of the present, only says that my parallel is not similar; for this assertion he gives no reason, and there is none.

5. Mr. Pargiter thinks that the argument *ex silentio* regarding the Guptas is incontestable. But this position is illogical; we know that the dynastic accounts were subject to alteration and on the theory maintained by Mr. Pargiter were in the case of the *Bhaviṣya* actually modified from time to time; we also know that in the case of the *Matsya* such modification did not take place. There is no possible ground on which we can say that the fact that the *Matsya* stops at a certain point in its dynastic list proves that it was not redacted later than at that point. That a Purāṇa redacted under the Guptas or under Harṣa cannot contain a dynastic list stopping short of the Guptas or Harṣa is an assertion which will not be accepted by anyone who realizes that we really know nothing as to the circumstances of the redaction of these works. Nor does it improve Mr. Pargiter's case to ascribe to me two conjectures about the date of the *Matsya*. The first alleged conjecture is a suggestion of a view which Mr. Pargiter might more reasonably have taken on his own general principles; the second alleged conjecture is the statement that the mention of Huns in the *Matsya* is "rather more plausible if we regard the *Matsya* as redacted in the fifth century". The actual date of the redaction is not, in my opinion, capable of proof by any available evidence.

6. There is no real parallel between my arguments from the silence of Vedic texts and that from the silence of the Purāṇas. Mr. Pargiter, I regret to find, is unable to appreciate the position which I have taken up and is convinced that I have shifted my ground. I can only

therefore once more explain what I have actually contended in regard to the silence of Vedic texts in the matter of *Trīṣaṅku*, etc. (1) These texts, viz. the *Samhitās* and the *Brāhmaṇas*, before, say, 600 B.C. are not books of historic purpose; they are ritual in purpose and their historical references are incidental; for this reason, when contemporary, they are of great value; when they refer to past events they represent the Vedic tradition, the value of which cannot be discounted by persistence in a misconceived reference to Professor Macdonell's remarks as to the period, after the date of the *Brāhmaṇas*,¹ when pessimism became part of the Indian view of life. (2) The *Purāṇas* are texts not one of which can be dated as early as A.D. 300 and which are very possibly much later. They contain the tradition of a much later period than the Vedic texts and represent the result of both priestly and popular development of tradition since the Vedic age. Their material, so far as it purports to represent events which fall in that age, can be divided into three classes: (a) statements which are consistent with Vedic references; (b) statements which are inconsistent with such references; (c) statements which have no counterpart in any form in the Vedic texts. To contradict Vedic tradition by texts of class (b), i.e. by texts of 1,000 years later, is contrary to all sane criticism; to accept as true statements of class (c) is to confound the possible with the actual, and to open the way to innumerable varieties of reconstruction of the legends. Or, put in a concrete case, are we really to believe, on the strength of the texts at least 1,000—in Mr. Pargiter's own view 1,800—years after the event, that a real King *Trīṣaṅku* was the subject of the quarrel of *Viśvāmitra* and *Vasiṣṭha*? Save in the region of Indian history no such suggestion would now be made.

7. As regards the question of the original language of the account, Mr. Pargiter would appear to be unaware

¹ See *JRAS.* 1914, p. 739.

that his thesis of translation from Prākṛit is only one phase of a much wider view that classical Sanskrit literature and the epic are not, strictly speaking, a real continuation of Vedic literature, but are based on a vernacular literature. But his arguments, which are those of his predecessors, are open to difficulties which are more serious than those to which their views are exposed. In this case Mr. Pargiter asks why irregularities occur in compositions which show that their authors could write good Sanskrit. The obvious answer is that the dynastic account does not show that its composer could write good Sanskrit. The facts are that there is a certain amount of bad Sanskrit in the dynastic account. Mr. Pargiter argues that the explanation is that the composer could write good Sanskrit, but was translating a Prākṛit original, and here and there he used incorrect Sanskrit to save the metre, here and there violated the metre by keeping correct Sanskrit forms. The theory is on the face of it incredible: if a man could write good Sanskrit, it is absurd to suppose that he would be so helpless as to write bad Sanskrit or bad metre merely because he had a Prākṛit original text to render. Fick's theory of the translation of an *Æolic Iliad* into Ionic is now discarded, but it had at least the plausibility that the translation was supposed to be one of a finished work of art, i.e. a literal verbal version. Why should a writer capable of writing good Sanskrit feel bound to render verbally a Prākṛit list of kings, wholly destitute of literary merit?

The explanation which I offer has no doubt the disadvantage of being less ingenious, but it remains in the realm of fact. It is a fact accepted by every scholar of repute, that from the earliest time known to us the vernacular affected the literary language. It is a fact that careless Sanskrit was written without the excuse of translation being available. Can Mr. Pargiter draw

any valid line of distinction between the irregularities of the dynastic account and those of (a) the Sūtras, (b) the metrical texts such as the *Bṛhaddevatā* and *R̥gvidhāna*, and does he really think that the irregularities there are due to translation from Prākṛit? In rejecting as a blunder my view of *atha Māgadharājāno bhavitāro vadāmi te* is he aware that the *Bṛhaddevatā* (iv, 32) has *sūkte 'sya rei parokṣoktā vakṣyāmi bhrātaraś trayah*? Either the *Bṛhaddevatā* is a version of a Prākṛit original—which is absurd—or Mr. Pargiter's blunder is very serious.

What we have in fact to recognize is that epic Sanskrit, and still more Purāṇic Sanskrit, are not good Sanskrit in the grammatical sense; that Sanskrit is essentially more popular and more tinged with vernacular than the Brahmanical Sanskrit proper, but to accept the obvious fact that the vernacular influence existed is one thing, to believe that the epic or the dynastic account is a translation is quite another. The simple translation method of Fick has in Homeric study been replaced by considerations of influence, and the same spirit will doubtless prevail in Indian studies, fortified as it is by the total absence of any other evidence of the alleged translation. Even in the beast fable Nīti texts which might have been thought to be peculiarly likely to be of vernacular origin, we know now that the earliest text was in Sanskrit.

Still less reason for a Prākṛit translation can be found in the metre. Of the irregularities cited, two are cases of vowels left short before *ks* and *tr*, as not rarely in the later epic;¹ one is that of a nine-syllable line with two short syllables at the beginning, of which the *Bṛhaddevatā* has at least five instances; the fourth case, *aṣṭāvimśatir Haihayah*, if not to be read *aṣṭāvimśati* (for which irregularity there are Sūtra parallels), simply shows that

¹ See Hopkins, *Great Epic of India*, p. 243.

in a mere list of names strict metre could be disregarded by a poet who was not a stylist: even the Homeric style permits violation of metre to fit in words such as proper names, which it cannot otherwise allow to stand. The growing disregard of position, as before *ky* and *tr*, may be due to Prākritic influences, but a similar disregard is characteristic of the *Odyssey* as against the *Iliad*, and still more of later Greek epic verse.

8. Mr. Pargiter (p. 146) has completely misunderstood the meaning of my argument as to Śiśunāga or Śiśunāka as based on *ekacchatra* for *ekakṣatra*. How the occurrence of Śiśunāka shows translation from Prākrit Mr. Pargiter has not yet explained. Śiśunāka may be either a Sanskrit variant or a result of Prākritic influence.

9. Mr. Pargiter's arguments from the use of expletives as pointing to translation come completely to shipwreck on his own quotation. If the author of the list could write good Sanskrit, then why in

*Sevātīś ca bhavitā rājā samās tv aṣṭādaśaiva tu
śatāni trīṇy aśīlīm ca Śakā hy aṣṭādaśaiva tu*

did he not omit *tu* and *hi*, if these particles are too superfluous to be possible? They are obviously needless for metrical purposes. In truth there is no escape from the dilemma: either, as Mr. Pargiter asserts, the author could write good Sanskrit, in which case we can only conclude that he saw no objection to the array of verse-fillers, or, as I assert, he was a mediocre writer of Sanskrit more interested in the subject than the style, who did not trouble over much about elegance. No theory of translation will explain his inserting a needless *tu* or *hi*.

10. Finally, Mr. Pargiter's last criticism (pp. 146, 147) of my remarks on his theory of an original Kharoṣṭhī MS. rests on a *petitio principii*, or perhaps upon a couple of such arguments, viz. (1) that the dynastic account had been written down, and (2) that it was written down at

a time when Brāhmī and Kharoṣṭhī only were in use. Mr. Pargiter can hardly fail to realize that my note was written to show that the dates assigned by him to the Purāṇas were wrong, and that therefore his second argument is valueless to me. As to his first argument, it rests on the use of *paṭhitān* in the *Vāyu* in place of *kathitān*, and that the *Vāyu* may by this phrase refer to a written record accords with my own view (1914, p. 1023). But when Mr. Pargiter says that *paṭh* in the Purāṇas always implies writing, as far as he is aware, it is impossible not to remind him that his opinion is opposed to every probability, the root never in any period of Sanskrit having any such normal implication, and to the plain fact that Böhtlingk quotes for the ordinary sense the epic, the *Harivaṃśa*, and the *Bhāgavata*, just as he cites these authorities for the sense desired by Mr. Pargiter.

A. BERRIEDALE KEITH.

A CORRECTION IN THE INDIAN CALENDAR

I have to thank Dewar Bahadur L. D. Swamikannu Pillai for having, in his *Indian Chronology* (pp. 99–101), pointed out two errors of calculation in the *Indian Calendar* (1896), of which the late Sankara Balkrishna Dikshit and myself were the authors. I find, on examination, that his criticism is perfectly just. It is unnecessary for me to explain how these regrettable mistakes arose, but it is of importance that they should be notified for the guidance of those who are in the habit of using our tables for the verification of dates of inscriptions.

The mistakes concern the intercalation and suppression of lunar months in the years Śaka 430 and 674 current, or

A.D. 507-8 and 751-2. The following corrections should be made in Table I of the *Indian Calendar* :—

(i) In the entry for the year A.D. 507-8 (p. xiv) in columns 8 to 12, instead of the present entry "12 Phālgunā; 9983; 29.249; 52; 0.156"; and (ii) in the entry for the year A.D. 751-2 (p. xxx), where those columns are left blank, the following should be substituted :—

YEAR A.D.	COL. 8.	COL. 9.	COL. 10.	COL. 11.	COL. 12.
507-8	{ 8 Kārttika 11 Māgha (Ksh.) 12 Phālguna	9884 15 9980	29.652 0.046 29.940	65 9980 51	0.195 29.940 0.153
751-2	{ 8 Kārttika 9 Mārgaś. (Ksh.)	9976 12	29.928 0.036	12 9920	0.036 29.760

The result is the same whether calculation is made by the first *Ārya Siddhānta* or by the *Sūrya Siddhānta*.

In case these corrections should lead to any doubt as to the accuracy of our other calculations it will be well to note that the above are the only mistakes that have as yet been brought to my notice in all the tables of the *Indian Calendar* since its publication eighteen years ago. Moreover, as Mr. Swamikannu Pillai has, freshly and by a different system, gone over the whole ground covered by our tables and finds no other correction necessary, that in itself is sufficient proof of their reliability. His criticism in these two cases is a testimony to the correctness of the remainder. Nevertheless *humanum est errare*, and I shall be greatly obliged if any reader of the *Journal* will tell me if he detects any other mistake. I have discovered one for myself, which I take this opportunity of notifying. In Table I of the *Indian Calendar*, in the entry for the year A.D. 1496-7, col. 13, the entry in brackets "(86)" should be "(87)".

R SEWELL.

INSCRIPTIONS IN THE VICTORIA AND ALBERT MUSEUM¹

I. In the Victoria and Albert Museum at South Kensington is exhibited an octagonal pillar of red sandstone, 3 ft. 9 $\frac{3}{4}$ in. in height and 1 ft. 2 $\frac{1}{2}$ in. in width (1065–1883), which once formed part of the rail in the Buddhist sanctuary at Muttra. Both the front and the back are adorned with carvings. On the front is incised, in good letters of the Aśoka type between 1 and 1 $\frac{1}{2}$ inches in height, the following inscription:—

Ayāyē Kurāṅgiyē dānam

i.e. "the gift of the Lady (*āryā*) Kurāṅgī." The lady is obviously identical with the donatrix whose name is recorded in Nos. 939–44 of Lüders' List of Brāhmi Inscriptions (*Epigraphia Indica*, vol. x); she was daughter of Jiva and sister-in-law of Indrāgnimitra.

On the other side of the column is carved, in letters varying from $\frac{1}{8}$ to 1 inch in height, the word *Vallabhasya*, "of Vallabha." The characters are northern, and may be of the tenth century, or thereabouts.

II. In the same collection is a figure of the Jain Tirthankara Pārśvanātha (No. 931 I.S.), of black carboniferous shale, of which the pedestal contains a Kanarese inscription running along the five front faces. The characters are well formed, and are of the type common in the last quarter of the twelfth century; their average height is from $\frac{5}{16}$ to $\frac{3}{8}$ inches. The text is as follows:²—

(Line 1.) *Ōm³ Munna Hōsaṇa-dēśak=unnata-Dēṣya-gaṇakke rāyāchāryyaṁ inn=i(i) Kuṁtana-dēśak=unnatan=āchāryya-*

¹ I must acknowledge my obligation to Mr. C. Stanley Clarke and Mr. A. J. D. Campbell, in charge of the Indian Section, for their assistance.

² Corrections of the text are enclosed in parentheses.

³ Denoted by the spiral symbol. These first two sentences seem to be metrical. The first, with some slight alterations, can be scanned as a *kanda* (*Munna . . . dēśakk= . . . dēśakk=*); but the metre of the second sentence is not apparent to me.

- (Line 2.) *varyya - Rāyāchāryyaṃ* || *Erambarageya*
dharmmam *Mumudi* (*Mummuḍi*) *Siṅgaṇa*
bādheimda (*bādheyimda*) *kettade mattam va-*
 (Line 3.) *ra-muni bāl = emd = u[d]dharisidan = āchāry-*
ya-rāyan = agaḷita - mahimam || *Svisti* (*Svasti*) *śrī*
Mula (*Māla*) *-saṅgha-Desīya-*
 (Line 4.) *gaṇa - Pustaka - gachchha - Kuṇḍakumā -*
ānvaya-Rōṇa-saṁbanda (*saṁbandha*) *Erambara-*
gāya (*Erambarageya*) *nagara Jin* (*Jin*) *-ālayakke*
jīrṇa (*jīrṇa*) *-ōdhāhārav* (*ōdhāhārav*) *= ā-*
 (Line 5.) *gī* (*āgi*) *Miṇḍagudaliya Kēti Setṭiyaru*
maga Malli Setṭiyaru śrī-Pārś[v]adēvara māḍisi
pu-
 (Line 6.) *ṇya - vridhiy* (*vṛiddhiy*) *= ese vridhiyam*
(vṛiddhiyam) *māḍi koṁḍa* || *Dhare - rūvārī*
*(rūvārī)*¹ *Chakravartti Pālōja śrī śrī*

Translation.—"Om! Of the Desīya Gaṇa, formerly exalted in the Hoysala land, a sovereign teacher, the excellent teacher Rāyāchārya in his turn is exalted in this Kuntala land.² When the religion of Erambarage (Yelburga) had perished through the persecution of Mummuḍi Siṅga, [this] sovereign teacher, unfailing in his greatness, restored it, saying: 'Noble sage, live again!' Hail! For the restoration of decayed parts of the temple of the Jina in the city of Erambarage, belonging to the Rōṇa community of the line of Kuṇḍakunda in the Pustaka Gachchha of the Desīya Gaṇa in the Mūla Saṅgha, Malli Setṭi, son of Kēti Setṭi of Miṇḍagudali, caused to be made [an image of] Pārśvadēva, and by the increase of his merit gained increase. The stone-engraver was Chakravartti Pālōja. Fortune! fortune! fortune!"

¹ This seems to be more or less parallel to the title *birūḍa-rūvārī* in *Inscriptions of Sravasti Belgola*, No. 43 f.

² The Western Chālukya territory above the Ghauts.

Yelburga, the Erambarage of our inscription, lies in the Lingsugur district of the Nizam's Dominions, in lat. $15^{\circ} 37'$ and long. $76^{\circ} 3'$.¹ Now an insignificant town, it was once the capital of powerful princes. In the eleventh and twelfth centuries it was ruled by a Sinda dynasty, who as a rule were feudatories of the Western Chálukyas of Kalyāṇi.² The fortunes of the family seem to have begun to decline early in the twelfth century, after the reigns of Siṅga II and his son Ācha II. The latter was ruling in A.D. 1122. From the year 1169 the family disappears from history.

It seems reasonably likely that the Siṅga mentioned in our present inscription is Siṅga II, who was ruling about the beginning of the twelfth century. So far as is known, no other Siṅga had control of Yelburga about this period. On the other hand, the characters of this inscription suggest that it was written about 1175. It may therefore be conjectured that after a persecution of the Jains by Siṅga in the first quarter of the twelfth century their cult in Yelburga fell into decay for a considerable time, possibly half a century. After this period had elapsed, and more peaceful times had come for the Jain community, Rāyāchārya stimulated their flagging zeal and induced them to restore the cult of their old temple of Pārśvanātha. The temple needed repairs, and in the course of these the statue of Pārśvanātha bearing the present inscription was set up by Malli Setṭi, presumably to replace a dilapidated older figure.

L. D. BARNETT.

¹ For Erambarage = Yelburga see *Ind. Ant.*, 1901, p. 262.

² See *Journal of Bombay Branch Royal Asiatic Society*, vol. xi, and *Epigraphica Indica*, vol. vii, app., Nos. 224, 234, 243; vol. viii, app. ii, p. 10.

AN ARAMAIC INSCRIPTION FROM TAXILA

The accompanying plate depicts an Aramaic inscription found on the site of the ancient city of Taxila, and is from a photograph kindly sent by Sir J. H. Marshall, Director-General of Archaeology in India, who in his covering letter gives the following account of the stone:—

"The inscription was carved on an octagonal pillar of white marble, of which only the piece photographed has been found. It was discovered in a house of the first century B.C., and must have been buried, in its present worn and broken condition, before the beginning of our era . . . There is no trace of any characters on the face of the column to the left, and it may be assumed from the blank space immediately on the right of the record that on this side also there were no other letters. The face of the marble is damaged in places, with the result that estampages, however carefully taken, are indistinct and confusing. For this reason I have prepared this photograph by running sepia into the chiselled grooves of the letters wherever the chiselling is quite clear, but not where there is any doubt about it."

As will be seen from the shape of the block, the arrangement of the letters, and the nature of the contents, the present stone is only a fragment, constituting the left-hand side of the original epigraph. Hence the meaning, and even some of the letters, must remain obscure, unless a fortunate chance should reveal the lost companion block. Nevertheless something of its purport can be understood even now, and it is to be hoped that patient study in the course of time will throw more light upon its nature than is at present possible.

The letters, as well as the language, are Aramaic, and are of a type which may be assigned, with due reserve, to the early part of the fourth century B.C. They suggest a somewhat later date than the Carpentras Stele (*C.I.S.*,



Aramaic Inscription from Taxila.

Inscr. Aram., No. 141 = pl. 13), and have considerable affinity with certain papyri of the fifth and fourth centuries published *ibid.*, Nos. 144 and 146, as well as with some of the Assuan papyri in Sachau's *Aram. Papyrus und Ostraka*. I venture to offer the following tentative transliteration:—

1. חפרת	7. ון בהו ורדה
2. לכמירתי על	8. הורשת ורדי הות
3. ננרותא על	9. מראן פרצרו
4. ארו ושן גבותא	10. הלכות[ה]
5. ולאבוהי הנו	11. ואף בננהי
6. הופקירתי זכה	12. למראן פוירר[ס]

To this I would add a few observations—

Line 1: probably "I have carved". 1. 3: ננרותא seems to be connected with ננר carpenter (cf. *Aram. Papyrus und Ostraka*, xxv, 3; liii, 2. 2; viii, 9), and here perhaps means "carving". 1. 4: if my division of the words is right, the wood and ivory are those of the royal preserves; the Crown usually owned all elephants and possessed large domains, so that wood from the latter and ivory would come under the term גבותא, from גבא. 1. 5: "and to his father were." 1. 6: division and sense are obscure; the letter that I have transliterated as 7 might be something else. 1. 8: one is tempted to see in the first five letters a flexion of the root corresponding to the Hebrew ירש, but the dialect demands *tau*, not *resh*; perhaps then we may separate הו from רשת, and translate the latter and the two following words as "authority and power was". 1. 9: the *cade* is uncertain; Sir John Marshall regards it as most probable that what I have assumed to be its shaft is really the shaft of such a letter; but the letter, even in that case, might be read as *koph*. Is it possible that we have here the Indian name *Parāśara*?

l. 10: "his conduct" ? l. 11: "and also his sons."
 l. 12: the personal name here is again obscure. At the end of the line are traces of the right-hand side of a letter, which might be *samekh* or *beth*; if we accept the former, it is possible to vocalize as *Pavira-rāṣa*, i.e. *Pavira-rāja*, corresponding to the Sanskrit *Pravira-rāja*. The name *Pravira* is well known in epos, and might well be borne by a real man; and the change of a sonant to a surd consonant, such as that of *j* to *ṣ*, is quite common in the North-West dialects.

L. D. BARNETT.

THE FIRST ARAMAIC INSCRIPTION FROM INDIA

I must thank Mr. F. W. Thomas for his great kindness in sending me the photograph taken by Sir J. H. Marshall, and also Dr. Barnett for letting me see his tracing and transliteration. The facsimile is made from the photograph, which is as good as it can be. Unfortunately, on the original, the letters are as white as the rest of the marble, and it was necessary to darken them in order to obtain a photograph. This process introduces an element of uncertainty, since in some cases part of a line may have escaped, and in others an accidental scratch may appear as part of a letter. Hence the following passages are more or less doubtful: line 4, **הב**; l. 6, **פקיר**; l. 8, **ט** and **וב**; l. 9, the seventh and ninth letters; l. 10, **ט**; l. 12, the name. The difficulty of reading, where the words are unfamiliar, is increased by the similarity of some of the letters: **כ**, **ג**, **ר** (**ר**), and even **י**, are liable to confusion; **ט** and **ה** in l. 7 (**בהר**), and ll. 8, 10; **צ**, **ק**, **ת**. No doubt if we had more material it would be possible to distinguish the forms. I read as follows:—

צדוק	1	Memorial
לדמירקי על	2	to DMIRKI for
נגרותא על	3	the carving on
ארו ושנהבותא	4	cedar and ivory
ולאבוהי הו	5	. . . and they belonged to his father.
הן פקודתי זנה	6	Behold, this is my charge
וך בהוורדה	7	. . . this Vohuvarḏa
מורשת וכזי הות	8	. . . bequeathing, and when she was
מראן פדירו	9	. . . our lord PDIDU (?)
מלכותה	10	. . . his kingdom
ואף בנוהי	11	. . . and also his sons
למראן פוידרש	12	. . . to our lord PVIDDŠ (?)

The first four lines (and perhaps the first six) are evidently continuous. Lines 6–10 are certainly not so. Nothing seems to be lost before l. 1 or at the end. On the right each line (?l. 6) begins with a full word. On the left nothing is missing but a letter here and there. Consequently it would appear that the inscription was originally engraved round a doorway or window, or more probably a panel containing a portrait (like e.g. the Nerab monument), thus—

צדוק		.....
.....	
.....	
.....
.....

Line 1 is quite uncertain. A word for "memorial" is wanted. The first letter may be a **צ**. The next may be a **ד**, perhaps like the **ד** (?) in l. 6. Otherwise a certain **ד** does not occur. The word **צדוק** is not found in this sense of "justification" or "acknowledgment", but it is quite a possible word. Cf. perhaps **צדקתא**, CIS. ii, 113².

l. 2. The first word must be a personal name. The **ד** might be **ד** or even **כ**, the **ד** might be **ד** (or **כ**?), the **ק** might be **ת**.

It cannot be Ptolemy's *Δαμυρική* (= South India), nor probably a Greek name *Δημόδοκος*.

l. 4. There is no doubt about the reading ארז "cedar". The remaining letters seem to be meant as one word, since elsewhere words are usually separated with some care. It would be read most naturally as שננבותא, which (unless it be an Indian word) is meaningless. If divided, שן would mean "ivory", but נבותא is difficult. The נ is unlike that in l. 3. I suggest that it is a badly formed ה, and that the compound is a variant of the Hebrew שנהבים (1 Kings x, 22; 2 Chron. ix, 21), meaning simply "ivory".

l. 5, if it follows without a break on l. 4, may be translated "which belonged".

l. 6. This and l. 8 are the most difficult parts of the inscription. זנה is certain. The preceding letters look like one word. The suffix ' shows that it must be a noun. The ה and ת are certain, and the first ' is probable. The other letters are ו (or י), פ (or ו), ק (or ת or צ). The ר is strange, and no certain instance of it occurs elsewhere in the inscription. It seems necessary to divide the letters and read הן פכידת', or "הן", making הן — the end of a lost word, since the pronoun could hardly stand in the same phrase with זנה. The word פכידתא is not found in the sense of a "trust", but it is quite possible. Or is it, after all, a Hebraism (cf. l. 8) וצירת' "and I designed" or "decorated"? I confess it is more like that. Then הן might be the pronoun, subject of הלו in l. 5, and the text would be continuous so far.

l. 7. ברווררה a Persian name? Cf. Havaredhi? (Justi, *Iran. Namenbuch*, s.v.). וך may agree with a previous noun now lost, or with ברו "the said V."

l. 8. The first letter is probably a מ which has lost its two top strokes (cf. l. 10). It might perhaps be ה (cf. l. 7), but in the certain cases of ה its right-hand stroke is more slanting. The ר might be a נ. The ת is more probable than י' after ש, but it might be a ק (הונשק). If we read מורשת, it can only be a Hebraism (cf. on l. 6), a feminine participle Hiphil referring to ברווררה, which will be a feminine name. Then הות

naturally agrees with the same. The intervening word must be **וכן**, though the **כ**, as it appears, is more like a **ר**, as Dr. Barnett reads it.

l. 9. The name is very uncertain. Its second and fourth letters should be **ר** or **ד**. If we were right in reading **ברוררה** in l. 7, the second letter, at least, ought to be **ר**. The fifth may be the same, with its top stroke lost, or a **ל**. The third is the most puzzling. The top is very small for a **ק**. It might possibly be a **צ**, as Dr. Barnett takes it, but the tail looks more like a scratch on the marble than an intentional stroke. Then what can the small remaining head be? I suspect that the name is the same as that in l. 12. As the name of some important personage, perhaps a king (cf. **מלכותה** in l. 10), it is written large here (so **ברוררה** in l. 7), but smaller when repeated in l. 12. Both names have the same title **טראן**, and in so short an inscription there does not seem room for the mention of two such persons. If they are the same the third letter may be a strangely formed ' in both cases. In the Elephantine papyri **טראן** is the title of the Persian governor.

l. 10. The first letter is the same as in l. 8. Dr. Barnett takes both as **ה**, but **הלכותה** is a very unlikely word here. The last letter must be **ה**, though only a thin outline of it remains.

l. 12. See above on l. 9. The second letter of the name as it stands is a clear **ל**. The third seems to be a badly formed '. The other two may be **ר** or **ד**. At the end is a trace of **ש**, which need not necessarily be part of the name. Some letters may be missing at the end of lines 9-12. If ll. 11, 12 are continuous the meaning may be either "the sons of P." or "his sons (did or gave something) to P."

As to the date, since the names are not identified, we can only judge from the forms of the letters. Note especially the **ה**, **ו**, **י**, **ל**, **מ**, **ע**. Unfortunately we have no other Aramaic inscription from India for comparison, and must therefore look elsewhere. All these letters are far removed from the archaic forms, e.g. of Sinjirli. The **ה**, **ו**, **ע** are very like the forms used in the Elephantine papyri—allowing for the difference between carving and

writing—but slightly more simplified. Several other, less crucial, letters are practically the same as at Elephantine. We might then conclude that the inscription is of about the same date as the papyri, say somewhat earlier than 400 B.C., and that both are in the official hand of the Persian Empire. But \aleph , \beth , γ , δ are slightly later in style. The δ is exactly like that in CIS. ii, 144¹ (about 400 B.C.). In a Ptolemaic papyrus published in PSBA. (1907, p. 260 +, and plates) it has an almost modern form. The Ptolemaic \aleph is somewhat like the \aleph here, and the γ is very like that in l. 12. We shall probably therefore not be far wrong in ascribing the inscription to about the middle of the fourth century. Whether Aramaic would have continued in use in India after the expedition of Alexander we cannot say. There are no Greek inscriptions in India, and Greek influence seems to have come much later.

The discovery of this inscription throws an interesting light on the origin of the Kharoṣṭhi alphabet. Taxila, where it was found, was a chief city of the Kharoṣṭhi district, and as Bühler says (*Vienna Or. Journ.*, 1895, p. 45) "it is here, of course, that the Kharoṣṭhi alphabet must have originated". The view that Aramaic was officially used by the Achæmenians (first suggested by Clermont Ganneau), that after their conquest of Northern India about 500 B.C. it became current there, and that Kharoṣṭhi was derived from it in this way, is thus being gradually confirmed. The papyri have shown that the language was officially used by the Persian Government, and no doubt when (if ever) excavation is possible on suitable sites in Persia itself, further evidence will be found. As a matter of fact, however, Aramaic as a *lingua franca* was not introduced by the Persian Empire. It was used in much earlier times, not for monumental or literary purposes so far east, but as a trade language side by side with the impossible cuneiform system, as is

shown by the "dockets" on Babylonian tablets. Under Assurbanipal (from 668 B.C.) an Aramæan copyist (A-BA [= *dupšar*] *mât armāa*) was officially employed as well as an Assyrian (Hommel, *Geogr.*, i, p. 191 +). By the Persians this was further extended, whether or not we believe with Hommel (*ibid.*, p. 202 +) that the O.P. cuneiform is derived from some form of "Phœnician-Aramaic" alphabet. The use of cuneiform for writing Persian did not last long, and after the fall of the empire when we next meet with written Persian it is in various forms of the Aramaic character. It is not difficult to see how the alphabet would eventually reach India. This inscription is the first proof that it did get there. Its date is nearly that of the first specimens of Kharoṣṭhi, and it thus forms a sound basis for comparing the two systems of writing. See Bühler's table in VOJ. (1895, after p. 66) or in his *Indische Paläographie*, p. 22.

A. COWLEY.

NOTICES OF BOOKS

LES ARABES EN BERRÉRIE du XI^e au XIV^e siècle, par
GEORGES MARÇAIS, Docteur ès Lettres. pp. 767.
Paris: Leroux, 1913.

Barbary, it may be recalled, is the part of North Africa comprising Morocco, Algiers, Tunis, and Tripoli. The whole region was included in the Islamic conquests of the Arabs, and was subdued by them more or less completely by the early part of the eighth century. Their first invasions and their occupation for the next two centuries or so resulted in the settlement of a considerable number of Arabs in the country. The Arab element thus introduced into the population appears, however, to have been limited for the most part to a few of the towns and to have remained stationary, or perhaps to have tended rather to dwindle than to increase. Another Arab invasion took place in the eleventh century, with very different results in this respect. It led to the spreading of the Arabs all over Barbary and their establishment in the various parts of it side by side with the original inhabitants, the Berbers, or mingled with them. This process took about three centuries to complete, and while it left the Berbers on the whole preponderant in numbers, it meant that the Arabs had become a very considerable section of the people. The history of the Arabs in Barbary from the eleventh to the fourteenth century covers a considerable ethnographic change.

The occasion of the eleventh century invasion was the rebellion of the eastern province of Barbary against the Fatimid Khalif of Cairo. The Khalif, in consequence, set in motion two tribes of Arab Badwins to take possession of the revolted province. These tribes, Hilâl and Sulaim,

accompanied by a few other tribal units, made their appearance in the eastern part of Barbary in A.D. 1050. Sulaim stayed in Tripoli. Hilāl, proceeding west, first overran Tunis and then extended itself further westward. By the middle of the twelfth century, in consequence mainly of this extension of Hilāl, the Arabs had spread over more than half Barbary. Within the next century they had covered the rest of the distance to the Atlantic. Sulaim, advancing from Tripoli to Tunis about the beginning of the thirteenth century, helped to press Hilāl to the westward to Central Barbary and Morocco. The tribe of Ma'qil, one of the small units at the time of the invasion, had gradually travelled westward along the northern edge of the Sahara, increasing greatly in numbers as time went on, and by the middle of the thirteenth century had ranged along most of the eastern and southern border of Morocco from near the Mediterranean to Sūs. Arabs of Hilāl had been brought to Morocco in other ways. After the Arabs had scattered over Barbary, there was a good deal of moving about before they reached a state of normal equilibrium.

In general the Arabs remained nomads. With hardly an exception they founded no states of their own, but they attached themselves, either in the quality of marauding intruders or that of unruly subjects and partisans, to the various Berber kingdoms within whose sphere they found themselves. Their history runs in the maze of Berber politics. The principal Berber dynasties in the ascendant towards the beginning of the period under consideration belonged to the division of the Berbers known as *Ṣanhājah*, and consisted of the *Zirids* of Eastern Barbary, with their capital at *Qairawān*, their neighbours to the west, the *Hammādids*, and the *Murābiṭs* (*Al Moravides*) of Morocco. In the middle of the twelfth century the *Muwahhids* (*Al Mohades*), who belonged to the division of the Berbers known as *Maṣmūdah*, swept

away the dynasties of *Ṣanhājah* and subjected all Barbary for a short time. Towards the end of the twelfth century the short-lived dynasty of *Banī Ghāniyah*, representing a recrudescence of the *Murābiṭ* sovereignty and violently hostile to the *Muwahhids*, set up in the eastern part of Barbary. In the thirteenth century the empire of the *Muwahhids* broke up. Morocco fell to the dynasty of the *Marīnids*, and Central Barbary to that of the *Zaiyānids*, whose capital was *Tilimsān*; these two dynasties represented a third division of the Berbers, that of *Zanātah*. Eastern Barbary came under the *Hafṣids*, who belonged to the *Maṣmūdah* division. The lesser Berber principalities and powers that rose and fell during the period were numerous.

Landmarks in the progress of the Arabs were the battle of *Haidarān* in A.D. 1051, at which the tribesmen of *Hilāl* signally defeated the numerically much superior army of the *Zīrids*, with the result that they were able to overrun the territory of the losers and honeycomb their power; the battle of *Sabībah* in A.D. 1064, resulting in a similar disaster to the *Hammādids*; and the battle of *Satīf* in A.D. 1151, where the *Muwahhids* defeated the combined tribes of *Hilāl* in a particularly stubborn encounter. It is remarkable that the defeat of *Satīf*, instead of being disastrous to the Arab cause, had the effect of furthering it, for it initiated the practice of transporting bodies of Arabs to the west, a course that the *Muwahhids* later had reason to regret. The kingdom of *Banī Ghāniyah*, which extended over part of Eastern Barbary, depended largely on the Arabs for its support, as did the kingdoms of the *Zaiyānids* and *Hafṣids*, particularly the former, and that of *Marīnids* was dependent on them to some degree.

The details of the progress of the Arabs are intricate. One of the reasons is that it is necessary to follow the movements of a large number of tribes. At the time

of the invasion the tribes were few, though even at that date it would seem that each of the two principal tribal bodies, Hilāl and Sulaim, consisted rather of a confederation of tribes of the same stock than of members of a single tribe. At all events, the original tribes soon split up into new ones, in obedience to the law that prevents a tribe getting beyond a certain size, and in this way natural increase of numbers led to other tribes being formed from time to time. To a large extent each tribe acted as an independent unit, but a certain connexion was maintained between tribes nearly related by their origin.

Of the history thus briefly summarized Monsieur Marçais in this work gives a full account. The available authorities are enumerated in his introduction. Foremost among them is the *Ibar* of Ibn Khaldūn. There are no others that are comprehensive, but there are several that cover a part of the period or one or more of the dynasties. To this class belong the *Kāmil* of Ibn el Athīr and the *Bayān* of Ibn 'Aḍārī, besides histories by less well-known writers, like Et Tījānī, Ez Zarkashī, El Marākishī, and Ibn Abī Zar'. Then there is the whole series of Arab geographers from Ibn Khurdādbih to Ibn Baṭūṭah. Finally, a not unimportant source of information, to be used with discriminating insight, exists in a large body of epic literature concerning the deeds of Hilāl in Africa. This consists of poems, of which a few only have been published and some have not even been written, but are preserved in a fragmentary state in memory. Some knowledge of these poems is still current, even among the common people, throughout the western half of the Arab-speaking world. Altogether, there is abundant information of a certain sort. The Arab writers, however, display the usual qualities of their kind—want of critical ability and lack of the sense of proportion, besides an almost complete neglect of anything in the nature of precise statistical details. Monsieur Marçais says well of them, "Narrateurs

sans art, ils nous donnent des faits, grands et petits, un exposé minutieux et incolore"; he adds, "Combien il est malaisé de dresser l'édifice d'une époque à l'aide de cette poussière d'évènements, c'est ce que nous aurions voulu laisser ignorer au lecteur, mais nous craignons trop d'avoir mal réussi dans l'essai de reconstitution que nous avons tenté, pour ne pas en rejeter un peu le tort sur nos informateurs."

Monsieur Marçais divides the history into two periods of about equal length. The first may be described as that of the rise of the Arabs, the second as that of their finding their level. Under the first he treats of the invasion, the fall of the Šanhājah kingdoms, and the *épopée* of Baṇī Ghāniyah; under the second, which covers the fourteenth and most of the thirteenth century, he deals with the Arabs according to the three main divisions of Morocco, Central and Eastern Barbary. A third section of the book contains a detailed account of the state of the Arabs in Barbary at the end of the fourteenth century, taken tribe by tribe. At the end there is a map showing the places occupied by the various tribes of Arabs and Berbers at this epoch. There are also four genealogical tables enabling the relationship of the tribes of Hilāl and Sulaim to be followed. Various questions, such as the nature of the tribe, tribal alliances, and feoffs, are treated of in appropriate places in the history. The book terminates with a chapter containing a long series of conclusions as to the economic life of the Arabs in Barbary, their social organization, and the political part they played, which are based on the preceding part of the text.

Monsieur Marçais' warning about the nature of his materials is necessary, but he has succeeded in spite of obstacles. He has executed his task so thoroughly and so well that it is easy to overlook its difficulty. Out of a mass of ill-ordered and ill-assorted facts, which as put

together in the originals leaves the reader with a feeling of bewildering confusion, he has managed to draw a full, clear, and well-balanced picture, throwing the main features of his subject into prominence, and subordinating minor detail to its proper place in the perspective. His book displays commendable judgment and literary skill, besides clearly representing the expenditure of much diligent research. It will certainly long remain a standard authority, and indeed in most of its range there seems to be little room for anything further.

One of the questions dealt with by Monsieur Marçais, the importance of which is evident, may be noticed specially: what was the number of the Arabs by whom Barbary was invaded? There seems to be no evidence of any material accession to their numbers from outside subsequent to the invasion. It is characteristic of the Arab historians that the whole of them yield but one single passage giving figures. This comes from the lost work of the contemporary writer Ibn er Raqlq, and is preserved by Leo Africanus (sixteenth century) and Marmol (sixteenth century). It estimates the combatant Arabs at the obviously round number of 50,000, and the total number of individuals of both sexes who took part in the invasion at the still more vague number of more than one million. In discussing these two figures, Monsieur Marçais points out the manifest disproportion between them, and arrives at the conclusion that the estimate of more than one million is materially above the reality. One cogent argument can be added to those he uses. The bulk of the invading Arabs came from Egypt, and began their movement by crossing the Nile, so that the territory they had occupied was limited to the eastern half of Egypt. Moreover, they did not constitute the entire Badwin population even of this half, for other Arab tribes can be pointed to which were settled in Egypt to the east of the Nile before them and

remained in that part after their departure. The total number of Badwins in Egypt in 1891 was estimated at 246,000, but of these only 100,000 were nomads, the rest having become sedentary or being in the course of settling down. The nomad Arab element in Egypt in the eleventh century may have been stronger than in the nineteenth, but there seems to be no ground for believing that it was then so enormously greater that less than half of it can have amounted to more than one million individuals. Such a supposition does not seem to be reconcilable, either, with any reasonable estimate of the total population of Egypt at the time. If the number of the invading Arabs was as many as 200,000 all told, even this is a good deal greater than it might be expected that Egypt would have been able to produce. Monsieur Marçais cites an estimate that the number of Arabs in Barbary in the sixteenth century was 4,650,000, a figure, however, which he regards as too high. It would be interesting to have a statement of the total number at the present day, and to be able to compare it with the number of the Berbers, but the present knowledge as to the population of Morocco seems to be insufficient for any exact comparison.

In his introduction Monsieur Marçais remarks of Barbary: "Il est peu de sol aussi agité et où l'agitation humaine apparaisse aussi stérile." The history of Barbary from the eleventh to the fourteenth century so far as the Berbers are concerned does indeed seem to represent little more than a perpetual tossing up and down. It is true that certain broad effects can be discerned as the result of the constant turmoil, viz. the division of *Ṣanhājah*, that of *Maṣmūdah*, and that of *Zanātah* each became politically predominant in its turn; but it is not clear that the passing of power from one to the other implied any essential change in the general conditions. From a wide point of view, the never-ending conflict can

probably be looked upon simply as a continual breaking in of the people of the mountain and desert on those of the cultivated parts and towns; the success of the former resulted in their becoming converted to the side of the latter and then in the end succumbing, in their turn, to similar attacks from the wilds. It was a contest between barbarism and civilization, and the latter receded slowly and tended to disappear. The effect of the immigration of the Arabs was not to introduce anything completely new, for there was a large nomad population before, but to intensify the struggle by increasing the proportion of the nomad element. The Arabs brought ruin and desolation to flourishing towns and fertile tracts, which the same fate would probably have overtaken without them, but at a less rapid rate. The remarkable feature of their history is the manner in which they contrived to lodge themselves among and ended by permeating a large and warlike nation. Clearly it was only owing to the disorganization and disunion of the Berbers that the achievement was possible, but then the Arabs themselves were particularly disorganized and disunited. Guided by no deliberate policy, and inspired by nothing more, it would seem, than the love of plunder, in the face of many difficulties and in spite of reverses, they managed somehow to prosper and to succeed. In this history a testimony to their vitality is given that helps to explain other Arab exploits.

A. R. G.

THE EARLY DEVELOPMENT OF MOHAMMEDANISM. Lectures delivered in the University of London, May and June, 1913. By D. S. MARGOLIOUTH, D.Litt. The Hibbert Lectures, Second Series. London: Williams and Norgate, 1914.

Islam resembles other religions in owing much to the followers of its founder. The great social and religious

structure of Muhammadanism as it appears in its completed form obviously could not have been constructed entirely by Muhammad. He is the undisputed originator, but his labours did not go beyond laying the first stones, and it was the task of his disciples and those who came after to rear up and crown the edifice. It is a question how far they succeeded in adhering to the original plan and in carrying out their work on lines that he would have approved. One may ask, in other words, to what extent Islam is really based on origins derived from Muhammad and has been developed according to the spirit and intentions of his doctrines.

An impartial inquirer is likely to find that in the development of Islam some new principles have been imported and that there has been some departure from the original scheme. This feature of the growth of Islam is brought prominently into view by Professor Margoliouth in his lectures. He begins by assuming in the reader an acquaintance with the elements of his subject, and taking the Qur'ān as the natural starting-point he discusses various questions relating to the sacred book, such as its own conception of itself and the way in which it was regarded by the Prophet's contemporaries. Hence he is able to explain some of its peculiar characteristics, like its abundant repetition and its variation in detail, and to show how it came about that it was not collected into a book until some time after the Prophet's death. He arrives at the important conclusion that the Qur'ān in general is genuine, i.e. that with some reservation it may be said that the material it contains was actually delivered by the Prophet. He then looks at the substance and shows that, in spite of any claims to omniscient comprehensiveness that may have been advanced on its behalf, the Qur'ān is far from offering a complete or a consistent guide to ritual, law, or ethics (to say nothing of the other

sciences included in the Islamic purview). A supplement to the Qur'ān was therefore indispensable.

A system of law being the first want, Professor Margoliouth first considers the way in which the legal supplement was obtained. His view is that to begin with, two sources of law existed, custom and the Qur'ān, custom being foremost, because the matters for which the Qur'ān provided were limited in number; and when, owing to the transformation of Arabia into an empire and the incorporation in Islam of numerous nations and communities with very divergent practice, this earliest theory became unworkable, a fresh source of law was imagined in the form of an oral law, which was suggested by the example of the Jews, and consisted for a time of "not anything quite definite, but merely what was customary and had the approval of persons of authority, all of whom presently merged in the prophet".

It is to be observed that, according to this opinion, Muhammad, who ultimately becomes the sole source of the law apart from the Qur'ān, was not originally one of its sources at all. Consequently, it seems to follow that he was considered by his contemporaries in his lifetime and the period immediately after his death to have acted, at least as far as the law was concerned, merely as the channel or mouthpiece of the Qur'ān. Is this notion in accordance with historical evidence and, moreover, is it in accordance with probability? Can one refuse to believe that Muhammad explained, interpreted, and amplified the admittedly discrepant and insufficient rules and maxims of law that the Qur'ān contains, and in this way, as well by his personal example, he added something to the legislation of the Qur'ān whilst he was alive, and that after his death the recollection cannot have disappeared? Accordingly, ought not a place to be given to Muhammad as one of the true

sources of the law from the very first? One may go further and doubt whether the present theory that derives the law ultimately from the Qur'ān and Muhammad has not always prevailed.

Certainly, it is beyond question that some of the law sprang from custom, and some of it from "what had the approval of persons of authority", that is to say, from the opinions of the companions of the Prophet and learned men, and from rules and directions instituted by khalifs, governors, and others. Occasionally, the real origin can be demonstrated to have been such, and it can be seen that the origin was subsequently attributed to the Prophet by an afterthought, as it were; Professor Margoliouth supplies examples. It is probable that the proportion of the law derived from these two sources is large. But the fact would not necessarily imply that there has been any change in the theoretical standpoint. Custom may have acquired legal force on the ground solely that it was sanctioned expressly or tacitly by the Prophet; authority may have attached to the opinions of companions and learned men for the sole reason that they were considered to have special knowledge of the Prophet's mind and thus to be able to represent his ideas; the khalifs, governors, and others may have been allowed the right to obedience because they were regarded as deriving their power ultimately from him. As a matter of fact, these are the beliefs that seem to have been entertained, and consequently custom, the authority of the learned, or of persons in power would not at any time have been admitted theoretically to have been independent sources of law.

Professor Margoliouth's account of the legal supplement seems, then, hardly to do justice to the work actually performed as legislator by the Prophet, and not to be quite fair to his followers, in that it charges them with having exalted him to a position which

he never claimed or filled, for this is what the complete change referred to in the theory of the law really entails. One derives the impression, too, that the early Muhammadans are accused of having fabricated the law from a few Qur'anic origins and then fathered their production on Muhammad. To consider this point, it is necessary to look at the form in which the law started. Broadly, it began not as a series of rules, but rather as a series of generally known practices, which were considered to be right on the ground that they were in accordance with the religion of God, that is to say, sanctioned either by the authority of the Qur'an or (according to the view advanced above) of Muhammad.

As there was general agreement about the practices of the law to begin with, there was no special occasion to look into the precise sanction for each of them; but the cases to be covered by the law kept on increasing and getting more various as Islam expanded and circumstances changed; so the body of practice grew rapidly, and, for easily explained reasons, as it grew it tended to become divergent. There was before long a clear need for settling and formulating the law. When the task was undertaken the current body of practice, which was the material, had to be scrutinized and the various items had to be either approved or rejected. A strict standard of validity had to be found. The first test of the validity of any practice was obviously the Qur'an, and where this did not give the necessary guidance, the next was whether the practice agreed with any precept or precedent of the Prophet that could be remembered: hence the appeal to the traditions. Thus the law was based on these two foundations, where it rests. The question how far the law has the authority of Muhammad depends chiefly on the reliability of the traditions, for the actual origin of any rule of law, as from a custom, is quite immaterial, if the ground for admitting it is not the

origin itself, but the fact that it was found to be justified by a genuine tradition. Good reasons for suspecting some of the traditions can no doubt be advanced, but it is possible to go too far in this direction. At all events, as Professor Margoliouth points out, the jurists had the keenest desire to abide by the scripture and tradition. One must absolve them of any wish to misrepresent or of conscious imposture.

A notable feature of Muhammadanism is that it affords a certain degree of recognition to some other religions whose members, subject to certain conditions, are allowed a subordinate place in the Muhammadan community. Professor Margoliouth treats of it in a lecture under the heading "The Status of the Tolerated Cults". He gives illustrations of the problems to which the institution gave rise and of the disabilities which its shelter imposed. Those who came under it were mostly Jews and Christians. We are shown how the relations between Muslims and Christians were good at first, but seem to have steadily deteriorated. In two other lectures Professor Margoliouth traces the movement in Muhammadanism towards asceticism and thence on to the form of pantheism known as *Şūfism*. Both systems involve, at least when carried to extreme lengths, beliefs and ideas quite contrary to any that prevailed at the start. In their development foreign influences certainly had some part, but Professor Margoliouth appears to be of opinion that their effect was not very considerable, and shows that there is no need to look away from Islam for the main origins. The ascetic exaggerated injunctions to prayer, fasting, and the like, which he found in the *Qur'ān*, and the *Şūfi* could base his wildest dreams on the texts in that book forbidding that anything should be associated with God. The ascetic, who was inspired by fear, and mortified himself with a view to a reward of eternal enjoyment, differed fundamentally in these respects from the *Şūfi*,

who was moved by love, and aspired to reunion with the divine by means of self-effacement. Yet in many of their practices the two were hardly to be distinguished, and *Šūfism* is to be regarded as an offshoot of asceticism.

There is a lecture on the philosophical supplement to the *Qur'ān*. It is remarkable how early Muhammadans began to speculate in the domain of religious metaphysics, how freely speculation was indulged in, and for what a length of time it lasted before orthodoxy was able to accept the system of dogmatics finally established as the universal creed. Professor Margoliouth finds traces of Aristotelian thought even in the *Qur'ān*, and obviously the members of the various schools who disputed and discussed in Mesopotamia, Syria, and elsewhere outside Arabia, must have taken some ideas from the notions of the native populations with which they came into contact. But the acquaintance of the Muslims with works of Greek philosophy came too late for much influence to have been exercised in that way. Professor Margoliouth does not consider that Islamic authors added anything to Greek philosophy.

The last lecture treats of the historical supplement to the *Qur'ān*. Islam made a complete break with the past, and this is suggested to be the reason for the very small amount of history of the pre-Islamic period in Arabia that has been preserved. The *Qur'ān* respected the Old and New Testaments, but where they did not agree with it the current versions were supposed to be corrupt. Hence in some cases copies of the original versions were "supplied". Legends and myths became attached fairly early to the historical figure of the Prophet.

Professor Margoliouth's lectures supply a distinct want. The number of original works in English dealing with the broader aspects of Islam and written by competent authors is not many, and the particular point of view

he has chosen seems to have been specially neglected. He writes with an exceptionally wide range of knowledge, and by giving detailed references to the original authorities he has utilized, some of which exist only in MS., he increases considerably the value of his work to the student. His lectures form a very useful and readable book. One might almost wish that he had assumed a little less preliminary acquaintance with the main facts of Muhammadanism and Islamic history, for the book would not then fail to appeal to a still wider circle of readers than those who will now be able to enjoy it.

A. R. G.

A NEW PRACTICAL GRAMMAR OF THE MODERN ARABIC OF EGYPT. By S. SPIRO BEY, Privat Docent, Geneva University. pp. xiv and 251. London: Luzac & Co., 1912.

The arrangement of this book is so eminently practical that it commends itself strongly to those desirous of learning the living Arabic language as spoken in Egypt, who wish to avoid the intricacies of classical grammar. The author prefaces his work with an essay on modern Arabic, in which he explains how the student should interpret the term "vulgar Arabic". He descants on the relation of the same to the classical tongue, which he advises should be discarded in all but purely literary studies. He complains that the general adoption of the modern speech, favoured by all non-Mohammedans, is still opposed by the majority of Mohammedans for two reasons: first, that it promotes understanding among the various Arabic-speaking nations; secondly, that any change would interfere with the Qorān as the Word of God. He meets these two objections with the prediction that the dialect of Egypt will eventually prevail over all dialects. It will be a very long time before this prediction comes true; but even then it is difficult to see how it will

settle the second point. So long as the Qorān is read in Arabic, so long will it exercise its influence on the spoken language, at least among the educated classes. In order to abolish completely the remaining classical words, and also to abandon the remnants of case endings (which he considers as impediments to modern Arabic), the author advises that the study of the old language be left to the schools in the same way as Latin and Greek in European countries. Despairing, however, of this method attaining its ends, he suggests the publication of two serious newspapers entirely written in modern Arabic, one to appear in Cairo, the other in Alexandria.

It would seem, however, that whoever wishes to learn a living language free from ancient classical forms should learn it entirely from the mouth of the people, and without the help of a book. How can a literary colouring be otherwise avoided? Mr. Spiro's book itself bears this out. He not only gives the grammatical terms in their original forms, but many paragraphs recall the good old grammar books.

Although modern Arabic is much simplified by casting off the old terminations, it is by no means an easy language to acquire. Whoever studies the author's book, which is the result of thirty years' experience in speaking and teaching, will appreciate it more if he is equipped with some previous knowledge of the literary language.

H. HIRSCHFELD.

ELEMENTS OF HINDU ICONOGRAPHY. By T. A. GOPINATHA RAO, M.A., Superintendent of Archaeology, Travancore State. Published under the patronage of the Government of His Highness the Maharaja of Travancore. 4to. Vol. I: pp. xxxiii, 59, 400, 45, 71, 160, 29; 143 plates. Madras: Law Printing House, 1914.

The old saying, *μέγα βιβλίον μέγα κακόν*, was never more signally falsified than in the case of the present

volume, which, measuring $10\frac{1}{2}$ inches in height, $7\frac{1}{2}$ inches in breadth, and 4 inches in thickness, is the best that has appeared to illuminate the obscure but fascinating domain of Indian iconography. It is a pioneer work, but with a fulness of information and sureness of touch which are unusual in pioneer works.

The author begins with a general introduction, in which he treats of his subject in its various bearings. As regards the æsthetic merits of Indian sculpture, which certain critics have recklessly belittled and others have no less indiscriminately panegyricized, his attitude is judicious. Observing that "images are to the Hindu worshipper what diagrams are to the geometrician" (Introd., p. 28), and therefore very liable to have their artistic beauty sacrificed in the interest of doctrinal symbolism, he admits the fact that Hindu art has seriously degenerated, and ascribes it to two causes. The first is the increasing influence of Tāntric ideas, in accordance with which the mystic attributes of the deities were denoted by monstrous multiplication of limbs: though art under such conditions may still succeed in being artistic, it is heavily handicapped in the effort. The second cause lies in the manner in which the rules for the guidance of the craftsman have become mechanically stereotyped, nullifying to a great extent the Āgamic demand for beauty (pp. 30 f.). The introduction is followed by an explanation of the most important technical terms of the subject, and then we come to the body of the work. Here we have full descriptions of the images appropriate to the cults of Gaṇapati, Viṣṇu, Garuḍa, the Āyudha-purushas, the Ādityas, and Dēvi, in accordance with the prescriptions of the Āgamic and technical literature, and, as far as possible, illustrated by comparison with extant images. Three appendices are added, one on the plan of the *parivāra-dēvatās* in a Vaiṣṇava temple of seven circuits, one on the *uttama-daśa-tāla* measure as used in making

images, and a third containing the Sanskrit texts from which are derived the prescriptions for making images which are comprised in the body of the work; and a full index completes the book. In the second volume we are promised a similar treatment of the iconography of the Liṅgas, Śiva, Subrahmanya, the Dik-pālas, and miscellaneous deities and divine beings.

There are so few misprints and inadvertencies in this book that we may be allowed to note those which we have observed. In p. 58 of the introduction the author has not noticed that the Śilpa-śāstra of Nagnajit quoted in Varāha-mihira's Bṛihat-saṃhitā is apparently connected with the Chitra-lakṣhaṇa, of which the Tibetan text has been lately published, with German translation, by Dr. Laufer.¹ On p. 3 of the introduction the reference to Pāṇini, v. 6, 96, should be corrected to v. 3, 96. In the body of the work, p. 14, the reference for pictures of the *varada-hasta* to "figs. 1, 2, and 3" is an error for "figs. 4, 5, and 6"; and the converse correction should be made on lines 2-3 of the next page. In the description of the *jñāna-mudrā* on p. 17 we read that "the tips of the middle finger and of the thumb are joined together"; but fig. 16, pl. v, to which we are referred, shows the first finger and the thumb in contact. On p. 165 should not "Sanyasa" be Sanandana? On p. 295 for "iconoclastic" read "iconoplastic".

L. D. BARNETT.

¹ The Bṛihat-s², lviii, 15, states that "the face together with the pile of hair is said by Nagnajit to be 16 *aṅgulas* in length"; this agrees with Chitra-l², p. 152, which gives the length of the face as 12 *aṅgulas* and that of the *uṣṇīṣa* as 4 *aṅgulas*. The Bṛihat-s² (ibid.) gives the width of the neck as 10 *aṅgulas*; Chitra-l², p. 150, states that the neck of figures flying towards heaven is 10 *aṅgulas* long and 10 *aṅgulas* thick. The statement of Bṛihat-s², lviii, 4, that the Dravidian type according to Nagnajit has a face 14 *aṅgulas* long, I cannot find in the Chitra-l²; but it may have been in the original source of the latter compilation. I may add that I cannot understand the reasons that have led Dr. Laufer to assign a Jain origin to the Chitra-l².

OBITUARY NOTICE

WILLIAM WOODVILLE ROCKHILL

By the death of Mr. William Woodville Rockhill, which took place at Honolulu on December 8, 1914, the United States has lost its senior trained diplomat and the world an intrepid explorer, a master of both the written and spoken languages of Tibet, and the greatest authority, in the West, on the modern political history of China.

Mr. Rockhill was the younger son of Thomas Cadwalader and Dorothy Anne (Woodville) Rockhill, being born at Philadelphia in 1854. On the death of her husband Mrs. Rockhill left the United States with her sons to reside in Paris, where the younger, William Woodville, entered the École Spéciale militaire de St. Cyr. On graduating from this college, he entered the Légion Étrangère in 1873, serving in Algiers till 1876, when he returned to the United States, and married (December 14) Caroline Adams, sole surviving daughter of J. Washington and Marie Louise (Hewling) Tyson, of Philadelphia. Shortly afterwards he took to ranching in New Mexico, but finding the life not to his liking he sold out and went to Switzerland.

The perusal during his St. Cyr days of Abbe Hue's *Souvenirs d'un voyage dans la Tartarie et le Thibet* inspired him with a strong desire—"the hobby of his life"—to explore this latter country, and all his spare hours in Paris had been spent at the National Library, and devoted, under the guidance of M. Léon Féré, to the study of its written language and of the few works written by Europeans concerning it. These studies resulted in the publication by Leroux, in 1884, of a translation (in French) of the *Prātimoksha Sutra*, or *Le traité d'émancipation*, and in the same year of *The Life of the Buddha*, in Trübner's "Oriental Series".

He realized, however, that if success were to crown the explorations he dreamed of, a knowledge of not only the written but also of the spoken language of Tibet was an essential requisite. With a view to gaining it, and, as he hoped, to obtaining access to valuable documents and works on Tibet in the Chinese archives, he applied for and obtained a position on the staff of the Legation at Peking, being appointed Second Secretary there on April 9, 1884. At Peking he gained the friendship of an intelligent priest from Lh'asa in the great lamasery Yung-ho-kung, with whom during the next four years he studied Tibetan, in which he became a proficient speaker. He also acquired during the same time a good knowledge of Chinese, both written and spoken. Meanwhile, he had been promoted Secretary of Legation on July 1, 1885, and had acted as *Chargé d'Affaires* in Korea from December, 1886, to April, 1887. In the following year he resigned his diplomatic appointment in China, and started from Peking on December 17 on a scientific expedition, under the auspices of the Smithsonian Institution in Washington, into Tibet, his ultimate objective being Lh'asa. On reaching Baron Tsaidam, however, he was informed that the large Russian expedition which had started the previous year under Prjevalsky had succeeded in reaching Lh'asa. As no scientific object was to be gained by going over the same ground, he revised his proposed itinerary, and decided to make his way into Kamdo (Eastern Tibet), and then, if possible, from Jyéundo to Batang. With the assistance of a powerful chief of the Naints'o Tibetans, he succeeded in reaching Jyéundo, after swimming his horses and yaks across the Dréchu (Upper Yangtze) and crossing it himself in a small yak-hide coracle, but the lamas there obdurately refused to give him guides to go south, or to assist him in hiring pack animals. He resolved, therefore, to leave his baggage with two of his followers, and to start at once

with the remaining two and a guide he had managed to engage. After thirteen days' hard riding he reached the large town of Kanzas; but here he encountered even stronger opposition than at Jyécundo, and would probably have lost his life but for his excellent knowledge of the language. He had to abandon all idea of reaching Chamdo and thence Batang, and had to shape his course south-east to Tachien-lu, which place he reached, via Dawo and Gata, on June 24, and Shanghai on August 20, 1889. As the statement that the Russians had penetrated to Lh'asa the previous year ultimately proved to be false, the abandonment of an attempt to reach that town was a bitter disappointment; but, as he wrote in a letter shortly after his return, Mr. Rockhill found consolation in the reflection that "Prjevalsky tried in 1882 to follow the route I took, but was unable to cross the Dréchu. Szechenyi wished to travel it, but was told no route existed through the country, and was refused permission. The French missionaries have been trying for years to get into it, but without success. South from Namts'o to Tachien-lu I have been the first foreigner who has ever put his foot in this part of Tibet; and the undertaking was specially difficult because the country is comparatively thickly populated". A detailed account of this journey is given in Mr. Rockhill's *The Land of the Lamas*.

The results achieved on this journey encouraged Mr. Rockhill to believe that he could by a second expedition into Tibet add considerably to our knowledge of that remote region. So soon, therefore, as he had worked up the results of the earlier journey, he determined—again under the auspices of the Smithsonian Institution—upon once more visiting Mongolia and Tibet, and endeavouring to traverse the latter country from north-east to south-west, or in other words to try and reach Nepaul or Sikkim from the Chinese province of

Kansu. He started from Peking on November 30, 1891, and as he had learned during his first journey that in that portion of Tibet which is under the rule of Lh'asa opposition to foreigners is much more violent than elsewhere, he endeavoured to steer clear of Lh'asa by striking south, instead of north, of Koko-nor (as he did on his earlier journey), and then due west. Circumstances, however, over which he had no control, forced him to diverge from his proposed route; and when he reached the Namru Valley, not over 30 or 40 miles from the Tengri-nor, and less than a month's travel from British India, and when at very nearly the same spot at which Bonvalot and Bower had been stopped in 1889 and 1891 respectively, his further progress southwards was arrested by the Tibetans, and he was forced once more to turn his steps eastwards to Tachien-lu, which he reached on October 2, 1892. Though the remainder of his journey was not through absolutely unknown country, for his route frequently crossed and sometimes coincided with those of Bonvalot and Bower, and from Ch'iam-do was identical with that taken in 1861 by Mgr. Thomine Desmazures, his admirable knowledge of the Tibetan and Chinese languages enabled him to collect much new information of great interest and value.

A very full account of this journey was published by the Smithsonian Institution in 1894, under the title *Diary of a Journey through Mongolia and Tibet*. This, and the earlier journey, gained for Mr. Rockhill the Patron's (gold) medal of the Royal Geographical Society.

On his return to America Mr. Rockhill was appointed Chief Clerk (April 14, 1893) in the State Department; a year later, April 14, 1894, he was promoted Third Assistant Secretary of State. He was nominated Delegate from the United States to the International Geographical Congress of London, 1895, and on February 11, 1896,

he became Assistant Secretary of State. On July 8, 1897, he was appointed Minister Plenipotentiary to Greece, Rumania, and Servia, and held this post till May 19, 1899, when, having applied for transfer on the death of his wife at Athens, he was nominated Director of the International Bureau of American Republics in Washington, a department entrusted with the work of fostering trade between the United States and the several Republics of South America, and maintained by them all jointly. In April, 1900, he married Miss Edith Howell Perkins, of Litchfield, Connecticut. On the relief of Peking by the Allied forces in 1900, he was granted leave to proceed to China as Special Commissioner of the United States, being appointed on February 24, 1901, Plenipotentiary on the part of the United States for the settlement of the Boxer troubles. After signing the Peace protocol on September 7 of that year, he returned to Washington, and resumed his duties as the Director of the International Bureau of the American Republics, retaining this post until, on March 8, 1905, he returned to China as Minister Plenipotentiary. While holding this office he was designated Ambassador Extraordinary to represent the United States at the funeral ceremonies of the Emperor of China, April 24, 1909. During this period of residence at Peking, he was able to render real service to the country in which he had been so long interested. When hostilities broke out in 1904 between Tibet and Great Britain, the Dalai Lama fled to Urga in Northern Mongolia, where he remained, changing his residence from one to the other of the three principal monasteries in the neighbourhood, till after the signature by China and Great Britain, in 1906, of the Agreement modifying the Younghusband Convention of 1904. Realizing that this settlement would facilitate his own return to Lh'asa, the Dalai Lama, as a first step, left Urga in the summer of 1907, and, crossing Mongolia, took up his residence

in the Kumbum Monastery, near Koko-nor. There he received an intimation from the Chinese Government to proceed to Peking for audience, and then so soon as possible return to Lh'asa, where his presence was urgently needed owing to the growing unrest that was spreading throughout Tibet. Accordingly, in the spring of the following year the Dalai Lama left Kumbum to take up his residence at the great Buddhist sanctuary of China, the Wu-t'ai-shan, in Shansi province. He lost no time in sending emissaries to Mr. Rockhill with letters and presents, together with an invitation to visit him. Mr. Rockhill accepted the invitation, and spent a week with him at Wu-t'ai-shan, and he saw him frequently during his subsequent stay in Peking. Mr. Rockhill describes him as "a man of undoubted intelligence and ability, of quick understanding and of force of character; broad-minded—possibly as a result of his varied experiences during the last few years—and of great natural dignity; and seeming deeply impressed with the great responsibilities of his office as supreme Pontiff of his faith, more so, perhaps, than by those resulting from his temporal duties". But he was "quick-tempered and impulsive"; and Mr. Rockhill was able to render him signal service by counsel and advice when the Chinese Government seemed intent on humiliating him, and so to smooth out a situation which at one time threatened to result in serious conflict. On May 17, 1909, he was appointed Ambassador to Russia. While at St. Petersburg he brought out, in collaboration with Dr. F. Hirth, Professor of Chinese at Columbia University, New York, a revised and enlarged edition of a translation into English of the *Chu-fan-chi* of Chau Ju-kua, an account of Chinese and Arab trade during the twelfth and thirteenth centuries, of which Dr. Hirth had earlier made a translation, published partly in English, but chiefly in German, in various scientific magazines. On April 24,

1911, he was transferred as Ambassador to Constantinople. In compliance with the customary rule that Ambassadors and Ministers of the United States should tender resignation of their posts on a change of President, Mr. Rockhill placed his resignation in the hands of President Wilson on his election. It was accepted, and his successor was appointed in the autumn of 1913.

Having handed over charge of the Embassy, Mr. Rockhill started at the end of November, 1913, on an expedition overland to China, in order to form for himself an impartial opinion of the general condition of that country under the Republic established as the result of the revolution of October, 1911, visiting Urga *en route* to study the status and conditions of Mongolia, which had declared its independence of China. His interesting reports, embodying the results of the observations and inquiries made by him in the course of this journey, have been published by the American Asiatic Association in their monthly Journals. While on this mission, the President of the Republic, Yuan Shih-k'ai, pressed Mr. Rockhill to accept the post of Adviser to himself on both home and foreign affairs. This he agreed to do, but on the understanding that he need only reside in Peking during the winter months, and be at liberty to work at other seasons through the Chinese legations abroad; and it was on his first trip to China in fulfilment of this arrangement that he met his death. A cold contracted at San Francisco prior to sailing developed on board ship into so serious an attack of pleurisy that on reaching Honolulu he had to be landed for treatment. The pleurisy was conquered, but he succumbed four days later, on December 8, 1914, to heart failure, that had supervened.

An indefatigable and conscientious worker, he was always busy in the study with his pen during such leisure as his diplomatic duties allowed him. His principal works were:—

Prātimoksha Sutra, or Le traité d'émancipation. Leroux, 1884.

The Life of the Buddha. Trübner's Oriental Series, 1884.

Tibet, from Chinese Sources. Royal Asiatic Society's Journal, 1891.

Uddānavarga, the Northern Buddhist Version of Dhammapada. Trübner's Oriental Series, 1892.

The Land of the Lamas. The Century Co., New York, 1892.

Diary of a Journey in Mongolia and Tibet in 1891-92. Smithsonian Institution, Washington, 1894.

Notes on the Ethnology of Tibet. Smithsonian Institution, Washington, 1895.

The Journey of Friar William of Rubruck. Hakluyt Society, 1900.

The Chu-fan-chi of Chau Ju-kua. Imperial Academy of Sciences, St. Petersburg, 1912.

Conventions and Treaties with or concerning China and Korea. 2 vols. Department of State, Washington.

At the time of his death, he was publishing in Japan the Chinese text of Chau Ju-kua's *Chu-fan-chi*, with the original Preface, which had been lost, but which Mr. Rockhill discovered by chance preserved in one of the vast encyclopædias for which China is famous, and in the pages of *Toung Pao*, to which he had been for years a regular contributor, what may be considered a supplement to Chau Ju-kua's work—an account, gathered from contemporaneous Chinese writers and dynastic histories, of the relations and trade of China with the Eastern archipelago and kingdoms on the Indian Ocean during the fourteenth and fifteenth centuries.

Mr. Rockhill was an Honorary Corresponding Member of the Royal Geographical Society, a Corresponding Member of the Institut de France, and of the Gesellschaft für Erdkunde, and had been a Member of the Royal Asiatic Society since 1882.

ALFRED E. HIPPISEY.

NOTES OF THE QUARTER

(January-March, 1915)

I. GENERAL MEETINGS OF THE ROYAL ASIATIC SOCIETY
January 12, 1915.—Sir Charles Lyall, Vice-President,
in the Chair.

The following were elected members of the Society :—

Pandit K. Bhaskara Shastri.

Mr. Girindra Nath Roy Chaudhury.

Three nominations were approved for election at the
next general meeting.

Colonel Sykes read a paper on "The History of
Persia".

A discussion followed, in which Professor Browne,
Mr. Ghafur Khan, and the Chairman took part.

February 9, 1915.—Lord Reay, President, in the Chair.

The following were elected members of the Society :—

Miss F. M. G. Lorimer.

Dr. Ahmad Khan.

Mr. H. Niel Randle.

Three nominations were approved for election at the
next general meeting.

Professor Macdonell read a paper on "The Development
of Early Hindu Iconography".

A discussion followed, in which Mr. Vincent Smith,
Mr. Havell, Mr. Sewell, Dr. Daiches, and Dr. Thomas
took part.

March 9, 1915.—Sir Mortimer Durand, Director, in the
Chair.

The following were elected members of the Society :—

Miss Antonia Lamb.

Mr. Hari Chand.

Mr. Amolak Raj Davar.

Nine nominations were approved for election at the
next general meeting.

Mr. Legge read a paper on "The Worship of Mithras and its Mysteries".

A discussion followed, in which Mr. Kennedy, Sir Henry Howorth, and Dr. Gaster took part.

II. PRINCIPAL CONTENTS OF ORIENTAL JOURNALS

I. JOURNAL ASIATIQUE. Série XI, Tome IV, No. 1.

Danon (A.). Meïrath 'Enaïm, version en néo-grec et en caractères hébraïques de Jérémie x, 11; de Daniel ii, 5-vii, 28; et d'Esdras iv, 7-vi, 26, du caraïte Élie Aféda Béghi [1627].

Weill (R.). Monuments et histoire de la période comprise entre la fin de la xii^e dynastie et la restauration thébaine.

Pelliot (P.). Notes à propos d'un catalogue du Kanjur.

II. BULLETIN DE L'ÉCOLE FRANÇAISE D'EXTRÊME ORIENT. Tome XIV, Nos. ii-v.

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Cœdes (G.). Une recension palie des Annales d'Ayuthya.

Maspero (H.). Sur quelques textes anciens de chinois parlé.

Przłuski (J.). L'Or dans le folklore annamite.

Bonifacy (A.). Nouvelles recherches sur les Génies thériomorphes au Tonkin.

Déloustal (R.). Des déterminatifs en annamite.

Pham Quynh. Deux oraisons funèbres en annamite.

III. JOURNAL OF THE STRAITS BRANCH OF THE ROYAL ASIATIC SOCIETY, No. LXVI.

Mead (J. P.). Hikayat Raja-raja Pasai.

IV. INDIAN ANTIQUARY. Vol. XLIII, Pt. dxcviii.

Swamikannu Pillai (Diwan Bahadur L. D.). The True and Exact Day of Buddha's Death.

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Rangachari (V.). History of the Naik Kingdom of Madura.

Abdul Wali. The Poems of Prince Kamran.

Pt. dxlix.

Vencoba Rao (G.). Sketch of the History of the Madhva Acharyas.

Enthoven (R. E.). Folklore of the Konkan.

Pt. dl.

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V. LE MONDE ORIENTAL. Vol. VIII, Fasc. ii.

Kolmodin. Observations sur les textes bilin de M. Reinisch.

Mattsson (E.). Tūlit il'umr, texte arabe vulgaire transcrit et traduit avec introduction notes et commentaire.

VI. PROCEEDINGS OF THE SOCIETY OF BIBLICAL
ARCHÆOLOGY. Vol. XXXVI, Pt. vii.

Hopkins (L. C.). Chinese and Sumerian.

Pilcher (E. J.). The Bronze Talismans.

Nash (W. L.). A Scarab and a Leaden Sling-bolt from Samaria.

Langdon (S.). A Seal of Nidaba, the Goddess of Vegetation.

Read (F. W.). Egyptian Royal Accessions during the Old Kingdom (cont.).

Vol. XXXVII, Pt. i.

Sayce (A. H.). The Inscription of Carchemish.

King (L. W.). Foundation Inscriptions from the Royal Palace at Erech.

Hopkins (L. C.). Chinese and Sumerian (cont.).

Read (F. W.). Egyptian Royal Accessions during the Old Kingdom (cont.).

Langdon (S.). Philological Comments on K. 45.

VII. MEMOIRS OF THE ASIATIC SOCIETY OF BENGAL.

Vol. III. No. viii, pp. 449-514.

Haraprasad Shastri. *Catuhṣāṭikā* by Arya Deva.

VIII. JOURNAL AND PROCEEDINGS OF THE ASIATIC SOCIETY OF BENGAL. Vol. X, Nos. vii-viii.

Chakravarti (N.). Spirit Belief in the Jātaka Stories.

Brown (J. Coggin). Further Descriptions of Stone Implements from Yünnan.

Beveridge (H.). Sirhind or Sehrind.

— The Date of the Death of Shāh Beg Arghūn, the Ruler of Sind.

IX. T'OUNG PAO. Vol. XV, No. iv.

Chavannes (E.). Une version chinoise du conte bouddhique de Kalyāṇaṃkara et Pāpaṃkara.

Laloy (L.). Hoaï-nān Tzè et la musique.

Gauchet (L.). Note sur la généralisation de l'extraction de la racine carrée chez les anciens auteurs chinois.

X. JEWISH QUARTERLY REVIEW. Vol. V, No. iii.

Singer (Dr. C.). Allegorical Representation of the Synagogue in a Twelfth Century MS. of Hildegard of Bingen.

Sulzberger (J. M.). Ancient Hebrew Law of Homicide.

Halper (Dr. B.). A Volume of the Book of Precepts by Hefes B. Yaśiaḥ. Arabic Text.

XI. REVUE DE L'HISTOIRE DES RELIGIONS.

Tome LXIX, No. ii.

Amélineau (E.). Les Coptes et la conversion des Ibères au Christianisme.

Deonna (W.). Questions d'Archéologie religieuse et symbolique.

Toutain (J.). La Basilique primitive et le plus ancien culte de Sainte Reine à Alesia.

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JOURNAL
OF THE
ROYAL ASIATIC SOCIETY
1915

XVII

THE KINGS OF VIJAYANAGARA, A.D. 1486-1509

By R. SEWELL

CONSIDERABLE difficulty has been experienced by Government epigraphists in dealing with the history of the double usurpations of the kingdom of Vijayanagara in Southern India and the dates of accession and death of the various rulers in the period A.D. 1486-1509; and a note on these matters based on a number of inscriptions may have a beneficial effect in somewhat clearing the ground.

The last well-known king of the First Dynasty was Virûpāksha II, son of Dēva Rāya II. He was also called Praudhadēva. According to Nuniz, the Portuguese chronicler, who wrote about fifty years later upon information given to him when residing at Vijayanagara, this king Virûpāksha had two sons, the elder of whom slew his father and was in his turn slain by the younger. Nuniz calls this younger prince "Padearao", which is apparently a corruption of "Praudha Rāya" or Praudhadēva Rāya. This prince came to the throne, and not long afterwards was driven out by the very powerful minister Nṛsiṃha¹ of the Śāluva family. This was the

¹ I consistently spell his name thus, to distinguish him from his minister, the second usurper, Narasiṃha, or Narasa, or Narasaṃpa Nāyaka.

first usurpation, Nṛsiṃha certainly seizing the throne and uprooting the First Dynasty.

There is an inscription of Virūpāksha at Dēvarāya-sandra, Mulbāgal taluk, Kolar District, Mysore (*Ep. Carn.*, x, Mb. 104), the date of which is apparently Friday, July 29, A.D. 1485.¹ It mentions the minister Nṛsiṃha, and as it is of the same type as others of Virūpāksha's reign, we must accept it as a record of Virūpāksha II. The inscription, No. 593 of 1902,² which has been noticed both by Professor Hultzsch and Mr. Venkayya, registers a gift at Aṇbil, Trichinopoly District by Śaṅkha Saṅgama in Ś. 1408 (A.D. 1486-7) in the reign of "Dēvarāya Mahārāya Virūpāksharāya Praudhadēva Mahārāya". This description has been held as meaning that the then king was Praudhadēva, son of Virūpāksha, who was son of Dēvarāya. I must leave it to scholars to decide whether this is the only possible interpretation, or whether the meaning may be "Virūpāksha, *alias* Praudhadēva, son of Dēvarāya". In the first case the record may be one of Nuniz's "Padearao", i.e. of Praudhadēva, the younger son of King Virūpāksha II; in the second case it may be a record of Virūpāksha II himself, who also was called "Praudhadēva". Professor Hultzsch inclines to the former; but I notice that in his pedigree of the First Dynasty (*ARE.*, 1907, p. 86), Mr. Venkayya does not allot a son to Virūpāksha II. The details of the Aṇbil date are not known to me. There is another record of Virūpāksha dated in the same year, A.D. 1486-7, at Mūdabidure in South Canara (No. 31 of 1901). The dates of both of these should be carefully examined.

¹ I cannot say whether the mistake is in the original or made by the copyist. The weekday is transliterated as *Ā*, for *Ādivāram* = Sunday. It should be *Śu* for *Sukravāram* = Friday, which was the day of the given date.

² Inscriptions so quoted are those mentioned in the Government Epigraphist's lists published in the official *Annual Reports on Epigraphy*, Madras. These reports are quoted by me as "*ARE.*"

Now the earliest inscription as yet known in which Nṛsiṃha, the usurper, is credited with the imperial titles *Mahārājādhirāja Rājaparamēśvara* is found on a copper-plate inscription at Sitakallu, Tumkūr taluk, Mysore (*Ep. Carn.*, xii, Tm. 54), of which the date corresponds to November 1, A.D. 1486. We gather, then, that Nṛsiṃha's usurpation took place before that date, and that subsequent to July 29, A.D. 1485, either Virūpāksha II continued to reign, and was himself dethroned by Nṛsiṃha, or he was, as stated by Nuniz, assassinated, and was succeeded by his younger son (who slew his elder brother), this younger son being called "Praudhadēva", and being dethroned by Nṛsiṃha.

In this connexion an inscription at Gaṅgaikondachōlapuram, Trichinopoly District, should be carefully studied. As reported (*ARE.*, 1892, § 9; No. 83 of 1892), its date is A.D. 1482, 1483, or 1484, and it is said to belong to a later Virūpāksha, son of Mallikhārjuna. In the Official List, however, the name is merely given as "Virūpāksharāya", and from that we can make no inference. Mr. Venkayya seemed quite certain about it, and in the pedigree already mentioned he places a Virūpāksha III as son of Mallikhārjuna.¹

From what has been said we may accept the fact of Nṛsiṃha's usurpation and its date at some time later than July 29, A.D. 1485, and prior to November 1, A.D. 1486. This period may be lessened by examination of the dates of the two inscriptions above mentioned, Nos. 593 of 1902 and 31 of 1901. They may prove that Virūpāksha II, or at least some member of the First Dynasty, was actually on the throne on some day in A.D. 1486. No prince of

¹ I do not gather that the inscription definitely accords the rank of sovereign to this son of Mallikhārjuna, so that he may merely have been a prince of the reigning house. The date is said to be "Ś. 1405 expired, Śobhakṛit", but it was Ś. 1405 current that was Śobhakṛit, so that we have a choice of three consecutive years A.D.

that house is mentioned in any inscription known to me subsequent to the year A.D. 1486-7.

Attention must, however, be directed towards the inscription at Tiruvakkarsai in South Arcot, No. 198 of 1904, which is said to mention "Sāluva Narasiṅgadēva" (Nṛsiṃha), and his agent Narasa Nāyaka, and to be dated in the year Śōbhakṛit, A.D. 1482-3. It will probably be found that Narasiṅgadēva was then merely a viceroy. Narasa Nāyaka was for many years agent to him, both before and after the usurpation. All depends on the titles prefixed to Narasiṅgadēva's name.

Nṛsiṃha's reign must have come to an end on some day prior to Sunday, January 27, A.D. 1493, on which day two inscriptions at Kalasa in the Mudgere taluk, Kādūr District, Mysore (*Ep. Carn.*, vi, Mg. 54, 56), declare as then sovereign Immaḍi Nṛsiṃha, son of Nṛsiṃha.¹ A third inscription at the same place (Mg. 50) of date Tuesday, May 14, in the same year confirms this; and both are strongly supported by Firishtah's statement that when, on a Saturday in the month of Rajab, A.H. 898—which Saturday must have been either April 20 or 27, or May 11, A.D. 1493—a great battle took place close to Raichūr, between the forces of Ādil Shāh and those of Vijayanagara, the king of Vijayanagara was then young. (The translator calls him "a child", but this may not be a very accurate rendering.) This shows that the acknowledged ruler of Vijayanagara at the time of the battle was certainly not the veteran Nṛsiṃha.

Immaḍi Nṛsiṃha, then, began to reign in succession to his father, at least as early as January 27, A.D. 1493.

¹ In what follows it should be observed that if I mention, without further comment, a weekday in connection with the date of an inscription, the meaning is that the original details of the Hindu date state a weekday and that computation proves that the date is quite regular. When no mention is made of any weekday let it be understood that none has been stated in the original, that the A.D. date corresponds to the statement made in the record, but that the given Hindu date is incapable of positive verification.

An inscription at Pārattukōyil, Trichinopoly District, No. 736 of 1909, should have its date carefully examined. The official description of it is merely that the date is "Ś. 1414 Paridhāvi". This corresponds to the A.D. year 1492-3 which ended March 27, 1493. The name of the sovereign is given as "Bhujabalarāya", one of Immaḍi Nṛsiṃha's names.

No. 516 of 1906 mentions this king as ruling in Ś. 1415 Pramādin, which began on that day, March 27, A.D. 1493; and another record (*Ep. Carn.*, xii, Kg. 11) also mentions him as ruling in that year.

Further proof is afforded by *Ep. Carn.*, x, Gd. 80, of Wednesday, September 25, and by ix, D.-B. 42, 45, both of December 18, 1493.¹ These records are interesting in that they mentioned Immaḍi Nṛsiṃha's son, Dēvappa Rāya, as at that time ruling the Tippūr sima, so that the sovereign, though he may have been young, could not have been a "child". Firishtah was probably misled as to his age.

Without going into avoidable detail it is necessary to notice that we know of a series of inscriptions of Immaḍi Nṛsiṃha's reign which seem to prove that he was on the throne till some day between February 28 and July 15 or August 14, A.D. 1505. If this be so, the result puts an end to the belief expressed by some commentators that the second usurper Narasa's son Vira Narasiṃha was on the throne as early as A.D. 1502, and that the second usurpation took place some time before that year. It is for this reason that I desire to call attention to these records.

There is no need for details of all the records in all years. All I want to show is that this king's accession early in A.D. 1493 is fully supported by the evidence of inscriptions, and that there is a continuous series of his

¹ The name of the cyclic year is wrongly given in No. 42, but correctly in No. 54, which otherwise is a counterpart of the former.

records. But it is necessary to go carefully into those of his later years in order to arrive approximately at the date of the close of the reign. Some of these are the following.

Ep. Carn., xii, Kg. 26; May 29, A.D. 1494. "Saṣuva Immaḍi Rāya."

Ibid., x, Kl. 34; January 15, A.D. 1495. (Śaka year given wrongly as "1416" for 1414.) "Immaḍi Narasiṅga."

Ibid., ix, Dv. 66; January 27, A.D. 1495. "... Narasiṅga Rāya."

Ibid., ix, Bn. 123; March 27, A.D. 1495. "Immaḍi Śri Narasiṅga Rāya."

Ibid., ix, Ma. 31; August 20, A.D. 1495, eclipse of sun. "Immaḍi Narasiṅga Rāya."

Ibid., ix, Ht. 23; August 30, A.D. 1495. (Śaka year "1416" quoted in error for 1417.) "Immaḍi Narasiṅga Rāya."

In A.D. 1496, *Ep. Carn.*, x, Kl. 1; xii, Mi. 33; iii, My. 33.

In A.D. 1498, *ibid.*, iii, Nj. 16.

In A.D. 1499, *ibid.*, x, Mr. 5; ix, Cp. 52.

In A.D. 1499-1500, No. 166 of 1901; *Ep. Ind.*, vii, pp. 79, 80; No. 89 of 1908. These are in S. Canara and Madura.

In A.D. 1500-1, Nos. 199 and 151 of 1903, also from Madura.

In A.D. 1501-2, No. 615 of 1907. Gifts in this king's reign "for the merit of Narasa Nāyaka", i.e. the Tuḷuva Narasiṃha, the king's minister, the second usurper.

At this point we must consider the inscription said to be dated in A.D. 1501-2 in the year Durmati, at Chaulikere, near Bārūkūr, in South Canara, on which more than one writer has relied in order to prove that the second usurpation, namely that by Narasa Nāyaka or Narasiṃha, took place as early, or earlier, than that year. This is No. 152 of 1901. I believe that it has not as yet been published, and all that I can gather about it is gained from the Epigraphist's List and from a remark made by Mr. Krishna Sastri (*Ann. Arch. Rep.* for 1908-9, p. 171) that its date is given as in the month Māgha. The Official List describes it as a record of "Vira

Pratāpa-Vīra-Narasīṅgarāya" and as dated in Ś. 1424, Durmati. Durmati was Ś. 1424 current, and if the month is Māgha we should know that the date corresponded to some day between January 9 and February 8, A.D. 1502. Vīra Narasīṅha was the name of the second usurper Narasīṅha's son and successor, and if he was on the throne at that date of course his father's deposition of Immadi Nṛsiṅha, or whoever was the actual king of Vijayanagara at the time, must have taken place before then.

The story told to Nuniz about thirty years later was that the first usurper Nṛsiṅha left two sons, the governor of the kingdom being Narasa Nāyaka. The elder of these two sons was murdered by a page. The younger, named "Tamarao" (evidently Immadi Nṛsiṅha Tammaya-rāya), was placed on the throne, but kept in subjection by Narasa Nāyaka for "some days and years", being practically kept in confinement at Penukonda. Narasa Nāyaka then quelled a number of rebellions. Finally "Tamarao" was assassinated, and Narasa Nāyaka seized the throne. His actual reign was short. He was succeeded by his son, whom Nuniz calls "Busbalrao", for Bhujabala Rāya, one of the names of Vīra Narasīṅha.

My object is to show that this Vīra Narasīṅha could not, if we accept the evidence of a number of records, have been on the throne as early as A.D. 1502, and that Narasa Nāyaka's usurpation probably did not take place till A.D. 1505 at earliest.

The evidence in favour of its having taken place in A.D. 1501 or very early in 1502 rests, so far as I can see, on four inscriptions. The Chaulikere record above alluded to is one of these, and it would be well if this could be critically examined and published. At present our knowledge of it is imperfect. It might be found, for instance, to contain, prefixed to the name of the king, the titles of the Sāluva family, and if so it might perhaps

refer to Immaḍi Nṛsiṃha himself. It may be that no royal titles are prefixed to the name and that Vira Narasiṃha is not mentioned as king but as ruler of a province, which he may well have been, being the eldest son of his father, who held the king in thrall. I can trace no other record of Vira Narasiṃha, except this one, till the year A.D. 1505, the Nagaragere plates.

But there is an inscription of the year A.D. 1501-2 on copper-plates (No. 32 of 1905-6; ARE., 1906, p. 10) which has to be noticed. This is a grant which mentions *Mahāmaṇḍalēśvara Sāluva* Narasaṅṇa Nāyaka, son of Yisarappa Nāyaka, and the description, if it were not for the Sāluva name and titles, would certainly seem to be one of the second usurper, Narasa Nāyaka, son of Iśvara Nāyaka. But firstly, Narasa Nāyaka did not belong to the Sāluva family. It was Immaḍi Nṛsiṃha who did so. And, secondly, the record does not give him royal honours, but calls him merely *mahāmaṇḍalēśvara*, a great lord. If it should be argued that later kings of the Tuluva Narasa Nāyaka's family were accorded Sāluva titles, and that my first criticism therefore falls to the ground, I admit that this is so; but I think that that practice is confined to later years, and that it will not be found to have existed so early as the time of Narasa Nāyaka himself. In any case the second objection is enough, in my opinion, to make us hesitate to accept the document as a record of Narasa Nāyaka the king. If an usurper became a king he would assuredly insist on his royal title.

Two other inscriptions have been held to prove that Narasa Nāyaka the usurper's death took place about the end of A.D. 1503, and therefore that the usurpation and dethronement of Immaḍi Nṛsiṃha must have occurred before that date. These are (1) an inscription at Bāchahaḷli in Mysore (*Ep. Carn.*, iv, K. p. 64), the date of which corresponds to December 13, A.D. 1503, and which states that a gift was made to a temple "when Narasaṅṇa

Nāyaka died"; and (2) an inscription at Dēvikāpuram in North Arcot (No. 357 of 1912), the year of which only is given (= A.D. 1503-4), and which records a gift made "for the merit of *svāmi* Narasa-Nāyaka who went to the Śiva-lōka". These may both refer to the same personage, but there is nothing whatever in them, as reported, to show that that personage was the great king Narasa Nāyaka of Vijayanagara. In the first of these no titles of any sort are prefixed to the name,¹ and in the second the title *svāmi* certainly does not indicate a ruling sovereign. So that neither of these ought to be taken, as they have been, to refer to any king.

The evidence, therefore, in favour of the second usurpation having taken place as early as A.D. 1501-2 is inconclusive and weak.

Against it I have to place several inscriptions proving that the reign of Immaḍi Nṛsiṃha lasted till at least A.D. 1505. These are as follows:—

Ep. Carn., viii, Nr. 78. Date October 1, A.D. 1502. "Narasiṅga" with full titles of sovereign. Mention is also made of Narasa Nāyaka, the minister.

Ibid., xii, Mi. 106. Date Monday, March 13, A.D. 1503. Mentions Immaḍi Nṛsiṃha's *agent* Narasa Nāyaka.

Ep. Ind., vii, 74 ff. Date Sunday, August 25, A.D. 1504, the Dēvulapalle plates, which set forth Immaḍi Nṛsiṃha's pedigree, and represent him as then on the throne.

No. 895 of 1912. Date Wednesday, September 25, A.D. 1504. Names as sovereign "Immaḍi Nṛsiṃha Tammayadēva" (Nuniz's "Tamarno").

There is an inscription at Jyōtīpura, Bangalore District, Mysore, which, though the number of the Śaka year "1427" is wrongly stated in it in connection with the name of the cyclic year Kshaya (Ś. 1428), must belong to one of the years A.D. 1504-6, and certainly not to any

¹ The original reads, after a damaged and illegible phrase, ". . . *varu* Narasiṅga Nāyaka," etc. The termination ". . . *varu*" is not one of any royal title.

year earlier than 1504. This gives the name of the sovereign as Immaḍi Nṛsiṃha (*Ep. Carn.*, ix, Ht. 121).

Ep. Carn., x, Mb. 242, an inscription in Mysore of the year Krōdhana, A.D. 1505-6, mentions a gift made "in order that prosperity may be to" Naraśiṃha Mahārājah and Naraśiṅga Nāyaka. This helps to prove that Immaḍi Nṛsiṃha was alive in that year, and had not yet been murdered. Nuniz tells us that Narasa Nāyaka's usurpation took place after Immaḍi Nṛsiṃha's assassination.

No. 354 of 1912 at Dēvikāpuram, North Arcot, is an inscription of the reign of Immaḍi Nṛsiṃha, son of Nṛsiṃha. Its date is stated in the Epigraphist's List as "Ś. 1429 Raktākshi". 1429 is a mistake, either in original or copy, for 1426. The nakshatra is given as "Uttiram", which is also a mistake, either in original or copy, for Uttirādam. With these corrections the details of the date correspond to Friday, February 28, A.D. 1505. Two other inscriptions at the same place, Nos. 395 and 396, are dated correctly in the year "Ś. 1426 Raktākshi", so that the "1429" of the record in question is evidently a mere engraver's or copyist's error. No. 395 corresponds, as already stated, to Wednesday, September 25, A.D. 1504; No. 396 to Sunday, February 2, A.D. 1505. All these give Immaḍi Nṛsiṃha as the reigning king, and No. 395 mentions Narasa Nāyaka, in addition.

With all these records to guide us we cannot but decide that Immaḍi Nṛsiṃha was alive till at least February 28, A.D. 1505. Hence his death and Narasa Nāyaka's usurpation took place subsequent to that date.

Now to consider the records of King Narasa Nāyaka and his son Vīra Naraśiṃha. I have discussed the Chaulīkere inscription of possibly the latter, of date, as reported, A.D. 1501-2, and the copper-plate inscription of the same year, No. 32 of 1905-6, possibly of Narasa Nāyaka, neither of which can be assigned definitely to these rulers as kings; also the two records which mention

the death of a certain person called Narasa Nāyaka, but which cannot allude to the death of the king of that name.

With these exceptions the earliest mention of either father (the usurper) or son that I can find is one of the latter on (?) October 23, A.D. 1504.¹ This is at Halkūru, Goribiduār taluk, Kolar District, Mysore (*Ep. Carn.*, x, Gd. 38). It states that a private person built a car for a temple, and on this being reported to him Vira-pratāpa Narasiṅga-Rāya granted a village to that temple. This may well refer to Vira Narasiṃha, who may have been viceroy of the province, but there is no title whatever prefixed to the name, nor is there any hint given that he was then sovereign of Vijayanagara, and the inference must be that he was not so. The date, moreover, is not satisfactory.

The Nagarakere plates (*Ep. Carn.*, x, Gd. 77) afford the first clear mention, that I can discover, of Vira Narasiṃha as sovereign. They set forth his ancestry, fancifully for the most part, but mentioning his father Narasa as having been king, and they mention his half-brother Kṛṣṇadēva Rāya, who afterwards came to the throne. The date corresponds to either July 16 or August 14, A.D. 1505.

Putting this with the information we have previously culled from the inscriptions, it seems that, if the story of Nuniz is correct, Immaḍi Nṛsiṃha was murdered on some day subsequent to February 28, A.D. 1505, that the throne was immediately seized by Narasa Nāyaka, and that the latter's death and his son Vira Narasiṃha's accession took place very shortly afterwards, namely, on some day earlier than July 16 (or August 14) in the same year.

¹ This is the date if its lunar details alone are accepted, but the weekday is given as Thursday when it was Wednesday; and an eclipse is mentioned which did not take place. There was an eclipse of the moon on August 25, but not on October 23 of that year.

There are several inscriptions of Vira Narasimha's reign: e.g., *Ep. Carn.*, iv, Gu. 67, of some day between February 23 and March 10, A.D. 1506; ib. iii, ML 95, of December 15, A.D. 1506; ib. viii, Nr. 64, of January 13, A.D. 1507; ib. ix, Bn. 52, of January 3, A.D. 1508; ib. x, Mr. 6, at Tekal, of April 5, A.D. 1509; No. 342 of 1892, at Tādpatri, of May 4, A.D. 1509; and there are others. But these will suffice to carry on the sequence.

At Pulivēndla, in the Cuddapah District, is a record of Vira Narasimha's successor, Krishṇadēva Rāya. This is No. 491 of 1906, which I gather from Mr. Krishna Sastri's notice of it in the Annual Report of the Archaeological Survey for 1908-9, p. 175, is dated in the month Kārttika of Ś. 1431, the year Śukla, and therefore corresponds to some day between October 14 and November 13, A.D. 1509.

King Vira Narasimha therefore died on some day between May 4 and October 14 or November 13, A.D. 1509. Nuniz gave him a reign of six years, but we see now that it was about four years.

To sum up. Differing from some writers on the subject, I place the first usurpation by Nṛisimha as on some day between August 29, 1485, and November 1, A.D. 1486; his death and the accession of Immaḍi Nṛisimha as on some day prior to January 27, 1493; the second usurpation by Narasa Nāyaka, his death, and the accession of his son Vira Narasimha, as during the interval between February 28 and July 16 (or August 14), 1505. Vira Narasimha's death and the accession of Krishṇadēva Rāya are known to have taken place on some day earlier than October 14 or November 13, A.D. 1509.

Krishṇadēva Rāya's coronation took place on January 23 or 24,¹ A.D. 1510, as we know from the inscription at the Hampe Temple at the capital (*Ep. Ind.*, i, 363). The

¹ There were two civil days associated with the quoted tithi "14 Māgha", that tithi being current at both true and mean sunrise of both Wednesday and Thursday, January 23 and 24.

Tekal and Tāḍpatri records above mentioned conclusively prove that it could not have taken place on January 23 or 24, A.D. 1509, because his predecessor was alive in April and May of that year; and this sets at rest any question as to whether the festival held in January, 1510, was in honour of the actual coronation of Kṛishṇadēva Rāya or merely an anniversary. It was, of course, the former.

XVIII

THE MEANING OF THE "OM-MANI-PADME-HUM" FORMULA

BY THE REV. A. H. FRANCKE, PH.D., MORAVIAN MISSIONARY

WHEN spending several weeks at Leh, in 1914, I became interested in certain balcony-like structures containing three *mchod-rten* each. They were called *Rig-ādzin-mgon-po* (Lords, holders of wisdom) or *Rig-gsum-mgon-po* (Lords of the three [realms of] wisdom). Besides the three *mchod-rten*, the balconies contained also Lamaist pictures and inscriptions. Mr. H. Körber, of the Munich Museum, rendered me valuable help in the identification of several of the pictures. The following is a list of the *Rig-ādzin-mgon-po* (the abbreviation *Rig*, will be used instead of this long word) at Leh and neighbouring places.

1. *Rig. near east gate of Leh.*

It contains three *mchod-rten* of different colours. The one to the left of the spectator is of red colour, the one in the middle is white, and the one to the spectator's right is of blue colour.

The wall behind the *mchod-rten* is furnished with three pictures. Behind the red *mchod-rten* we find a picture of Mañjuśrī, with red skin, one face, and two arms, wielding the sword of wisdom, and exhibiting a book placed on a lotus. Behind the white *mchod-rten* we find a picture of Avalokiteśvara (Padmapāṇi) with white skin, one face, and four arms. In one of his hands he carries a lotus flower; the others are empty. Behind the blue *mchod-rten* we notice a picture of Vajrapāṇi, with blue skin, one face, and two arms. He wields a thunderbolt in his right hand.

Besides the pictures, the walls contain repetitions of the following formulas: *Om maṇi padme hūm*; *Vaḍzragurupadma-siddhi hūm*; *Om ā hūm*; *Om vakishvari mum*; *Om Vaḍzrapāṇi hūm*.

2. *Rig. near a house called Habibullah at Leh.*

It contains three *mchod-rten* painted red, white, and blue, beginning at the spectator's left side. The red *mchod-rten* is furnished with a Laṅtsa character reading *om*, the white one has a Laṅtsa *a*, and the blue one a Laṅtsa *hūm*.

Like No. 1, the wall behind the *mchod-rten* is furnished with the pictures of Mañjuśrī, Padmapāṇi, and Vajrapāṇi, all exhibiting the same symbols, and painted in the same colours.

The inscriptions on the wall read as follows: *Om maṇi padme hūm*; *Om vaḍzrapāṇi hūm*; *Om vaḡishvari mum*. Besides, we find the syllable *om*, inscribed in Laṅtsa characters on the right and left sides of the pictures.

3. *Rig. at gSang-mkhar, near Leh.*

Here we find three *mchod-rten* of white colour, the one to the spectator's left side being furnished with an *om*, the middle with an *a*, and the one to the spectator's right side with a *hūm*, in Laṅtsa characters.

Here we notice five pictures on the wall behind the *mchod-rten*. The group in the middle again represents Mañjuśrī, Padmapāṇi, and Vajrapāṇi, in the same colours, and with the same attributes as in Nos. 1 and 2. To the right of Mañjuśrī, *Tsön-kha-pa* is represented, furnished with a book and a sword, placed on a lotus flower; and to the left of Vajrapāṇi, we notice Padmasambhava wielding a *vajra* in one hand, and holding a *kapāla* in the other.

There are no inscriptions on the walls of this balcony.

4. *Rig. at Byams-pa, near Leh.*

This balcony contains three *mchod-rten* of red, white, and blue colour. They are furnished with the following inscriptions in Laṅtṣa characters: *a* is written on the red, *om* on the white, and *hūm* on the blue, *mchod-rten*. This is probably a mistake; the order ought to be the same as in Nos. 2, 3, 5, and 6.

Behind the three *mchod-rten*, the walls are furnished with the pictures of the following lamas and divinities, their order being from left to right: Kubera, Mañjuśrī, Tsoṅ-kha-pa, Padmapāṇi, Padmasambhava, dBrug-pa-bla-ma (?), Vajrapāṇi, and Sīṃhavaktrā. The three principal deities are painted exactly like their representations in Nos. 1, 2, 3, and 6. The pictures of the lamas Tsoṅ-kha-pa and Padmasambhava are not different from the representations in No. 3. In addition to these five pictures, we also find here representations of one more lama, and of two tutelary duties.

There are no inscriptions on the walls of this balcony.

5. *Rig. at Gadpa, near Leh.*

It contains three *mchod-rten* of red, white, and blue colour, furnished with the following inscriptions in Laṅtṣa characters: the syllable *om* is found on the red *mchod-rten*, *a* on the white, and *hūm* on the blue.

There are no pictures nor any inscriptions on the wall behind these *mchod-rten*.

6. *Rig. at Chu-Chi, near Leh.*

It contains three *mchod-rten* of white colour. The one to the spectator's left is furnished with a Laṅtṣa *om*, the one in the middle with an *a*, and the one to the spectator's right with a *hūm* in Laṅtṣa characters.

On the wall behind the *mchod-rten* we find pictures of Mañjuśrī, Padmapāṇi, and Vajrapāṇi, looking exactly like the representations of these deities in Nos. 1, 2, 3,

and 4. In addition to these, a picture of Tsoñ-kha-pa was added to the right of Mañjuśrī.

There are no inscriptions to be found on the wall behind the *mchod-rten*.

7. *Rig. at lHa-khañ, in Leh.*

It contains three *mchod-rten* of white colour without any inscriptions.

There were three pictures painted on the walls behind the *mchod-rten* which have suffered much. The one to the spectator's left apparently represented Tsoñ-kha-pa, the one in the middle can no longer be recognized, and the one to the spectator's right represented Padmasambhava.

On both sides of the pictures the syllable *om* is found inscribed on the wall.

8. *Rig. at the Chaon fort of Leh.*

It contains three *mchod-rten* of red, white, and blue colour.

On the walls we find pictures of the following deities and lamas, their order being from left to right: Padmasambhava, Mañjuśrī (with yellow skin), Avalokiteśvara (with eleven heads and a thousand arms, of white colour), Vajrapāṇi (with blue skin), a ĀBrug-pa-blama (?) (with two lotus flowers in his hands), Tsoñ-kha-pa, and the green Tārā. In a separate place on the wall we find a picture of a scene representing a hermit surrounded by various animals.

The walls also contain many repetitions of the *om maṇi padme hūm* formula, inscribed in four different kinds of character (viz. Tibetan, Laṅtsa, Warty, and another Indian script), and the following formula addressed to an unknown deity¹: *Bhrum, om padmosh-ṇishavimale hūm phaṭ, shubham!*

9. *Rig. on the road to dPe-thub.*

It contains three *mchod-rten*, which are all of white colour.

¹ Could it be the green Tārā?

The walls contain many repetitions of the following three inscriptions: *Om maṇi padme hūm*; *Om vajraśvari mūm*; *Om Vajrapāṇi hūm*.

In addition to the above let me say that similar groups of three *mchod-rten* are also found at other places in Indian Tibet. At Sa-spo-la, for instance, I noticed a good number of groups of three *mchod-rten* painted red, white, and blue, in different sites. There I also succeeded in seeing two balconies containing pictures and inscriptions on the walls behind the *mchod-rten*. In one case the pictures represented the eight emblems of happiness, and in the other they represented the three principal deities, viz. Mañjuśrī, Padmapāṇi, and Vajrapāṇi, besides the eight emblems of happiness. In the inscriptions, the *om maṇi padme hūm* formula was predominant.

The three principal formulas (compare No. 9) I have also noticed, among other places, at Yur-nad in Lahul, and on the rocks of Lake Padma-can in Mandi.

If we compare the various *Rig-ūdzin-mgon-po* of Leh with one another, the following facts became apparent:—

The three *mchod-rten* always found in them symbolize the three great Bodhisatvas whose pictures are in so many cases found painted on the walls behind them, viz. Mañjuśrī, Avalokiteśvara, and Vajrapāṇi. This is in particular indicated by the colours of the *mchod-rten*. (See Nos. 1, 2, 4, 5, 8.)

Whenever we find more than three pictures painted on the walls, the pictures of two famous lamas come first. They are the pictures of Padmasambhava, the incarnation of Vajrapāṇi, and Tson-kha-pa, the incarnation of Mañjuśrī. The third lama cannot yet be identified.

As regards inscriptions, the most frequent are a group of three times one syllable and a group of three times six syllables.

The first group is formed by the syllables *om*, *a*, *hām*. From their position on one or other of the three *nchod-rtse* it seems to follow that *om* in particular is addressed to Mañjuśrī, *a* to Avalokiteśvara, and *hām* to Vajrapāṇi.

The second group is formed by the following formulas (in proper orthography): *Om vāgīśvari mum*; *Om maṇipadme hām*; and *Om vajrapāṇi hām*.

As regards the first formula, it is plainly addressed to Mañjuśrī as "lord of the word" (*vāgīśvara*, Tib. *gsun-dban*). But there is a difficulty with regard to the termination *i*. If the stem of the word (viz. *vāgīśvara*) ends in *a*, the termination *i* cannot occur in any of the cases. In my opinion the termination *i* can only be explained as the vocative case of a feminine noun, ending in *i*. The form *vāgīśvari* is the vocative case of *vāgīśvarī*, "queen of the word," and the formula seems to be addressed to the feminine form of this famous Bodhisatva, i.e. to his *śakti*.

As regards the third formula, viz. *Om vajrapāṇi hām* (*vadzra* is the north-western dialectical form of *vajra*), it is plainly addressed to Vajrapāṇi, the "wielder of the thunderbolt". But here again the termination *i* of the vocative case compels us to assume a stem ending in *i*, i.e. Vajrapāṇī. And thus this formula also seems to be addressed, not to the well-known male deity of the thunderbolt, but to his female form, his *śakti*.

The second formula, viz. the *Om maṇi padme hām*, can therefore only be addressed to Avalokiteśvara or Padmapāṇi. It has mostly been explained as meaning "Oh, thou jewel in the lotus!"; and, to arrive at this explanation, it was considered necessary to look at the word *padme* as the locative case of a noun *padma*, "lotus." Dr. F. W. Thomas, of the India Office, was the first to recognize that the termination *e* is not that of the locative case of the masculine declension of nouns ending in *a*, but the vocative case of a feminine noun

ending in *ā*. The connexion of this formula with the two other ones shows us that *maṇipadme* is the vocative case of the name of a female deity Maṇipadmā, the "deity of the jewel-lotus", apparently the *śakti* of Maṇipadma,¹ who must be identical with Padmapāṇi or Avalokiteśvara.

The formula *Vaḍzrugurupadma siddhi hūm*, which is found once, is addressed to Padmasambhava or to his female energy. Another name found in a formula given in No. 8 cannot yet be identified.

The fact that all these formulas are furnished with syllables like *om*, *mum*, or *hūm*, also speaks in favour of my view that the nouns connected with them are to be taken as put in the vocative case. At first sight it is certainly surprising to find that all these divinities are addressed in their female forms. But it was the female energies of these divinities that were supposed to be most effective. And the Kesar saga shows us plainly that Kesar, when in difficulties, hardly ever addressed *āBum-khri-rgyal-po*, his heavenly father, but *āBum-khri-rgyal-mo*, his heavenly mother. From the above formulas it becomes also quite plain why the Chinese changed the sex of Avalokiteśvara. Their Kwan-yin is a female deity.

It is tempting to draw parallels between the triad of Mañjuśrī, Padmapāṇi, and Vajrapāṇi, and the Tibetan pre-Buddhist divinities of heaven, earth, and the *nāga*-world. But I shall leave that for another occasion.

According to Tibetan records, the *Om maṇipadme hūm* formula goes back to the times of Sron-btsan-sgam-po. We ask whether this assertion can be proved. From the excavations carried on by Sir Aurel Stein in the Taklamakhan desert we learn that the formulas *om ā hūm* and *Om vaḍzrapāṇi hūm* were certainly used in at least the eighth century. For they have been traced on some

[¹ As indicated by me, JRAS. 1906, p. 464.—F. W. T.]

of the fragments belonging to his collection: I now venture to say that, if this much has been preserved, we may suspect that also the two remaining formulas, viz. the *Om vāgiśvari mum*, and the *Om maṇipadme hūm*, were known during that early period; for I believe that the three cannot be separated from one another, and originally formed one single formula of three lines. If the full formula of three lines has not yet been found in the Stein Collection, this may be due to the fragmentary character of many of the relics.

Of the three divinities honoured by the erection of *Rig-ādzin-mgon-po* balconies, Padmapāni, or Avalokiteśvara, became the greatest favourite with Tibetans, in particular, as he became permanently incarnated in the Dalai-lamas. For this reason, the formula addressed to him became the most treasured one, and has now gained such popularity that the two others have almost passed to oblivion.

XIX

THE ZOROASTRIAN PERIOD OF INDIAN HISTORY

By D. B. SPOONER

(Continued from the January Journal, p. 82.)

PART II

OMITTING the various other passages in the *Mahābhārata* which might be cited to support our thesis, and viewing synthetically the results of our study so far, we find that, to use Hopkins's phrase, "the more important building operations"¹ of the epic are of pronouncedly Persian character. In the excavations of Pāṭaliputra we find that the palaces of Chandragupta were of pronouncedly Persian character, as well. The *Mahābhārata* ascribes its buildings to supernatural agency. The Chinese pilgrims tell us that the Mauryan halls were built by genii. The general attributes, as well as the very name, of the agent, Asura Maya, are found to be directly reminiscent of Ahura Mazda. It was by Ahura Mazda's grace the Achaemenian monarchs reared the palaces of Persepolis, which served as models for the Mauryan king. The epic tells us Maya wrought his works by magic. Pāṭaliputra is "wrought by magic" in the *Kathāsaritsāgara*.² Moreover, the description which the Asura Maya gives us of the palaces he built agrees most strikingly with the account of Chandragupta's palaces recorded by Megasthenes. Both are inferentially confirmed by the stratigraphical evidences in the soil, and by the general topography of the site, at Pāṭaliputra. The inference is thus direct that the palaces to which the *Mahābhārata*

¹ *Great Epic*, p. 392.

² *māyārūcitam Pāṭaliputram* (K. i, 3, 78). I am indebted to Dr. Vogel for this reference.

refers are those of Pāṭaliputra. We have, however, already seen above, in the line

दानवानां पुरा पार्थ प्रासादा हि मया कृताः

that these structures were erected for the Dānavas, and we have agreed with Weber that the Dānavas were a foreign people.

But, if the monarchs for whom Persian palaces were built by a divine spirit reminiscent of Ahura Mazda were themselves non-Hindu, as the *Mahābhārata* implies, it follows, obviously enough, that they must have been Iranian in race and Zoroastrian in faith. Were, then, the Mauryas Zoroastrians? I do not, myself, see any escape from this conclusion. The logic of the argument seems to me unimpeachable, and the evidence of the epic alone conclusive. Moreover, it is confirmed in the most direct manner possible by everything Megasthenes has told us of the inner life of Chandragupta's Court, and no single fact of Indian history or archæology known to me is in any way incompatible with such a theory. On the contrary, even so slight a search as I have had opportunity to make discloses various points confirmatory of the supposition.

The first question requiring consideration is the name *Maurya* itself. If this were of well-known and certain Indian derivation or significance, the fact would militate directly against a theory of Persian origin. But is it so? On the contrary, the only explanation advanced in India is confessedly unsatisfactory. In view of his reputed irregularity of caste, a Śūdra female named Murā has been hypothecated, who is supposed to have been a wife of the last Nanda and mother of Chandragupta. The story seems palpably apocryphal, and it has rightly met with scanty credence. The word *Maurya* is not to be explained as a metronymic from this unknown woman's name. Neither is any other Indian derivation possible.

But in Persia? No search for a Persian origin and explanation of the term has hitherto been made. No incentive for such a search existed. But now, I am glad to announce, such an inquiry has been instituted by my friend Mr. K. P. Jayaswal, who calls attention to the Avestan name *Mōurva*, the *Margu* of the Achæmenian inscriptions, and proposes, in the light of all the evidences now adduced, to derive *Maurya* from this source. The suggestion seems to me not only plausible *per se*, and phonetically unobjectionable, but also capable of as much demonstration as could reasonably be expected at this stage of our inquiry.

To begin with, *Margu* and *Mōurva* are explained as the name of the people of Merv,¹ and the name Merv itself appears as Merv, Meru, or *Maur*.² The last form is particularly noteworthy. Moreover, a place called Merv is singularly prominent in the traditions of both the Hindus and the Parsis. I say "singularly" so, because who would have expected the Hindus (or the Parsis either, for that matter) to look on Merv as the original Paradise and cradle of the Aryan race?³ Merv is an ancient city, to be sure; but what is known about it to justify a tradition of this kind, a tradition so clearly indicating this place as the scene of great beginnings and the source and centre of Aryan culture and Aryan migration?

There is a further point. When the *Encyclopædia Britannica* tells us that Merv is thus exalted in Hindu tradition, on the authority of the Purāṇas, it is manifestly referring to Mt. Meru, and assuming the identity of these two names. The names may well be identical. They almost certainly are. But is it possible to suppose Mt. Meru was located at or near the modern Merv? Merv, Mr. Oldham points out to me, is merely

¹ Cf. Bartholomæ's *Altiranisches Wörterbuch*, 1904, p. 1147.

² *Encyc. Brit.*, 11th ed., vol. xviii, p. 175, s.v. Merv.

³ *Encyc. Brit.*, loc. cit.

an oasis on the edge of a desert, remote from any mountain of importance. How could a region of this sort have given rise to the Hindu legend of Mt. Meru?

This raises the question of the location of the ancient Merv. Why is it so taken for granted that the Transcasian city is referred to? The evidence known to me is principally this: (1) the name of the city itself, which is clearly derived from *Mōurva*, and (2) the name of the River Mūrghāb on which it stands, which as clearly contains a reminiscence of the old name *Margu*. But if the modern names Merv and Mūrghāb suffice to locate one ancient *Mōurva* in this particular locality, why will not the like evidence do the same for a second *Mōurva* elsewhere, provided the modern forms are elsewhere traceable? That they are so traceable admits of no dispute, and, curiously, or significantly, enough, the region where they so occur is precisely that which all our other evidences would themselves suggest, namely at Persepolis itself.

The plain on which the Persepolitan platform stands is called *Merūdāsht*,¹ the plain of Merv. It is sometimes called the plain of Mūrghāb² as well. And why? Because the river which traverses it is not called "Polvar" throughout its course. That is a modern convention of European writers.³ Higher up its stream it is called Mūrghāb, where it flows near the village of Mūrghāb, and where also it lies nearest to Pasargadae, the seat of Cyrus and Cambyses. Here, then, we have at last a *Mōurva* indicated which might with reason figure in tradition as the scene of great beginnings. Did not the Achæmenians rise to power in this same vale of the Mūrghāb? Here also we find a mountainous country. Nay, the very platform of Persepolis is built against a sacred mountain,

¹ Lord Curzon's *Persia*, ii, 136 and *passim*.

² Benjamin's *Persia*, p. 97.

³ Perrot & Chipiez's *History of Art in Persia* (Eng. trans.), p. 277.

"the mountain of the Kings,"¹ which, according to the testimony of Hiuen Tshang, Chandragupta copied in his far-off capital.

Is not this *Mōurva* an altogether fitting centre for the Meru legend? It seems to be, the more so when we remember what Pāli tradition says of this mountain; how the Asuras were located at its base, and the Heaven of the Thirty-three Gods was situate upon its summit.² I shall endeavour to show further on that this number thirty-three has peculiarly Zoroastrian associations. Is not the recorded height of the mountain also Zoroastrian? The Purāṇas tell us it was 84,000 *yojanas* high. The number is curious. How is it derived, if not by multiplying the two pre-eminently sacred numbers of the Persians, seven and twelve?³ I would compare the 84,000 stūpas erected by Aśoka,⁴ which in turn becomes a point of large significance. For does not the façade of Xerxes' palace measure 84 cubits also?

I hold, therefore (and I thank Mr. Jayaswal for having put me on the track of this important evidence), that the name *Maurya* is indeed to be derived from a Persian form *Mōurva*, but I would identify this Merv with the valley of the Mūrghāb where stands the platform of Persepolis. Does not this explain for us the statements of the Greek historians and the otherwise extraordinary fact that Chandragupta's palaces seem copies of the Persepolitan? Persepolis was his ancestral home.

And there is yet another point I wish to mention. We have seen above that the *Mahābhārata* assigns the evidently Mauryan palaces to certain foreign kings called *Dānavas*. The Mauryas, our argument maintains,

¹ The *Βασίλειος ὄρος* of Diodorus; cf. Jackson's *Persia Past and Present*, p. 310.

² Cf. Childers' *Dictionary*, s.v. Meru; cf. also Wilson's *Vishnu Purāṇa*, II, 124, where Meru is given as a home of the Daityas and the Dānavas.

³ Cf. Browne's *Literary History of Persia*, pp. 310 and 408 ff.

⁴ Cf. Vincent Smith's *Aśoka*, p. 107.

originated from Persepolis, and were perhaps of Achæmenian descent. Does it not therefore seem, to say the least, extraordinary that the only name by which the Zoroastrians describe themselves in their inscriptions is *Airyavō-Danghavō*¹? Does not this seem perchance significant?

If we were dealing with cognates, I should not make this suggestion. It would be demonstrably wrong, as ancient Persian *ngh* appears in Sanskrit cognates commonly as *s*, so far as I can ascertain,² and the equivalent of *Danghavō* in Sanskrit is *Dasayavah*.³ But I cannot too strongly stress the fact that in dealing with foreign names, and borrowed foreign words in India, the rules of ordinary phonetics can almost never be applied. No one who has ever lived in India, and is familiar with

¹ Cf. *Encyc. Brit.*, 11th ed., vol. xxi, p. 246, s.v. Persia (Language and Literature).

² Cf. the *namanghā*, *ranghēush*, and *mananghō* of the Gāthā dialect with Sanskrit *namasā*, *vasor*, and *manasaḥ* respectively. (*Encyc. Brit.*, loc. cit., p. 247.)

³ I am indebted to Dr. Thomas for this equivalence between *Danghavō* and *Dasayavah*, and now find that it is a matter of greater importance than I had realized. For it is this very term *Dasayavah*, the cognate of *Dangharō*, which Mann applies to the people of Behar, Bengal, and Orissa (x, 44). Let me note further that he associates with these nations, and under the same name of *Dasayarah*, the Kāmbōjas, the Pāradās, and the Pahlavas, whose Persian character is admitted. It is noteworthy also that he places the Yavanas and the Śakas in the same category, which is quite in harmony with my theory as to the use of these words. Nor is his inclusion of the Chīnas, Kīrātās, etc., any argument against me, for he expressly states, in the following śloka, that some of these *Dasayarah* spoke Āryan tongues, and others not. Thus *Dasayavah* was evidently in Manu's time a term of definitely Persian colouring, but one which could be loosely applied, as all such terms can be in India, to any foreigners from the north or west. The synonymous *Dānava* is evidently a Sanskritization of the same word reimported under the form *Dangharō*. I wish to note also that Baudhāyana associates with *Aḡga*, *Baḡga*, and the other homes of the *Dasayavah* the western country of Saurāshtra (Surāt), which confirms my general theory perfectly, as will be apparent later; cf. Nundolal Dey's "Notes on Ancient Aḡga", in *JASB.*, vol. x, No. 9, p. 347, September, 1914. Several of the peculiarities of Aḡga which Mr. Dey specifies can be shown to be Zoroastrian or Mithraic.

the almost unintelligible way in which foreign names are distorted by the average Indian, could be in any degree surprised at a Pandit's pronouncing *Danghavo* as *Dānava*. But whether this really is the explanation of the term, I cannot pretend to say. The cumulative evidences make it seem to me most highly probable. But more than that cannot as yet be claimed. Such numismatic evidences as exist are all confirmatory, both of the derivation of *Maurya* from *Mōurea* and of the Zoroastrian character of the dynasty. It is conceded that the punch-marked coins are the oldest coinage in India. The Mauryas must have used them, as they cannot have been without coinage, and certainly used none of later type. That the weights of these coins agree, not with the system of Manu, as had been claimed, but with the Achæmenian system, has recently been demonstrated by a French savant.¹ I wish now to contend that the symbols also are prevailing,ly, even if not exclusively, Iranian.

It is, of course, generally supposed that the various devices impressed upon these coins are the private marks of private moneyers, stamped upon them from time to time, haphazard, as the individual coins came to, or left, their hands. But in the study I was privileged to make of a particular homogeneous find of these coins in Peshawar,² I succeeded in determining that such was certainly not invariably the case. On tabulating the symbols it appeared that at least one group of emblems was constant, and that an invariable concomitance was observable between this fixed group on the obverse and a particular mint-mark on the reverse. In other words, a fixed type of coin was established.

¹ M. J. A. Decourdemanche in the *Journal Asiatique* for 1912, Jan.-June, pp. 117-32.

² See my article on "A New Find of Punchmarked Coins" in the *Illustrated Annual of the Director-General of Archaeology in India* for 1905-6.

The component members of this group were as follows: (1) the usual simple solar symbol; (2) a complex solar (or astrological?) symbol; (3) a branch; (4) a humped bull, with taurine; (5) a *cailya*. In 1906 I supposed that these were Buddhist emblems. The difference, as we shall see further on, is less than might be imagined, but I now perceive that they are more probably Zoroastrian.

That the usual solar symbol is appropriate for the sun-worshippers goes without saying. What the second complex symbol is I cannot say, but it contains the taurine as an element. The branch, which as such is untraceable in Hindu symbolism, is intelligible as the sacred Branch of Hom, in which the Archangels brought to earth the Guardian Spirit at the time of Zarathushtra's birth.¹ The humped bull is readily explainable with reference to the Bull of Mithra, while the taurine (never hitherto explained) reproduces the ancient emblems of the Persians, which was in the form of a bull's head.² And let me note that it occurs also on Sassanian coinage.³

But the so-called *cailya* is the most important of this group. Who is responsible for its current designation as a *cailya* I do not know, but it is certain that it did not originally denote a Buddhist monument of any kind, because it occurs (most significantly) on the base of our column in Chandragupta's throne-room. Historically it is of Mesopotamian origin, Sir J. H. Marshall tells me, and in its native land it signified a hill. That the same is true to-day in India is proved by the fact that the Jains still draw this figure as emblematic of a certain Tirthamkara,⁴ and denominate it, even to-day, *Mt. Meru*! Could anything be more significant?

The distribution of the symbol is also worthy of

¹ Cf. Jackson's *Zoroaster*, p. 25.

² Cf. Benjamin's *Persia*, p. 9.

³ Cf. V. Smith's *Catalogue of the Coins in the Indian Museum*, p. 223 (Narsahi).

⁴ I am indebted to Mr. R. D. Bauerji for this fact.

remark. It is, as Mr. Banerji tells me, and as I have verified for myself, unusual on Indian coinage except on (1) the punch-marked coins, (2) certain analogous cast coins of early date, and (3) the coins of the Western Kshatrapas and Mahākshatrapas.¹ On the early Taxila coins it is well-nigh omnipresent.

It seems to me, then, that the theory that these marks are invariably the haphazard impresses of individual moneyers must be largely modified where definite groups of symbols can be fixed and they can be shown, both individually and collectively, to have a definite signification. When, for example, we find that coins agreeing in weight with the Achæmenian system bear on one side solar symbols and other marks susceptible of Zoroastrian interpretation, and show on the reverse such a combination as the peacock (*mayūra*) standing on Mt. Meru,² it seems an inevitable conclusion that these are Mauryan coins, the more particularly since we know them to be contemporary with this dynasty. And do they not show us also, in every single feature, that the Mauryas were Zoroastrians, and that they came originally from Meru?³

It strikes me, further, that this derivation of the name from *Mōurva* not only receives confirmation from, but also sheds light upon, that obscure passage in Patañjali, which Weber, naturally enough, found baffling.

Pāṇini's sūtra v, 3, 99 reads जीविकार्थे चापस्ते. A preceding sūtra (No. 96) has taught that, when from such a word as *aśva* you wish to form the name of a likeness or imitation of the object, you add the affix *kan*; thus *aśva* = "horse" and *aśvaka* = "the imitation", or "the

¹ Cf. Smith's *Catalogue*, p. 123 ff. For the Taxila coins see pp. 156 ff.

² Compare, for example, the coins numbered 24, 25, 27, 28, 29, 30 on p. 137 of Vincent Smith's *Catalogue*.

³ The fact that a Mervian people was recognized by ancient India is sufficiently clear from the ethnic name *Merubhūta*, cf. Wilson's V.P. II, 169.

figure", of a horse. Sūtra 99, however, shows that you elide this *kan* when the figure in question is one by which one earns one's livelihood, and which is not an object of buying and selling. At this point Patañjali steps in with the cryptic words *mauryair hiranyārthibhir arcāḥ prakalpitāḥ; bhavet; tāsu na syāt; yās tv etāḥ sampratipājārthāḥ, tāsu bhaviṣyati*. Weber translates these words as follows:¹ "Es hatten die nach Geld begehrenden Maurya Götterbilder anfertigen lassen. Auf diese passt die Regel nicht, sondern nur auf solche, die zur sofortigen Anbetung dienen (d. i. mit denen ihre Besitzer von Haus zu Haus wandern [um sie zu sofortiger Anbetung auszustellen und dadurch Geld zu verdienen])." Weber goes on to say that "die Nachricht selbst ist an und für sich eine höchst kuriose. Wenn es irgend ginge, möchte man unter *Maurya* hier ein Appellativum verstehen, etwa 'Bildhauer' oder dgl., wie auch Nāgeṣa, dessen Text indess verderbt ist (*Mauryāḥ vikretum prātimāṣilpavantas* ist ziemlich ungrammatisch), zu wollen scheint. Indessen ist eine dgl. Bedeutung sonst nirgendwo für das Wort nachweisbar".

Perhaps not the sense of "sculptor". But will not the sense of Mervian = Iranian = Zoroastrian do?

The Mauryas in question evidently did manufacture images, and made a trade in them, but they were not used by any *pājārī* as a source of livelihood, and were not the object of direct adoration. Images of the latter class we should call *idols*; those the Mauryas made were merely *statues*, as opposed to idols. Is not this the distinction Pāṇini would make? And is this distinction not appropriate for Zoroastrian sculpture? Idolatry as such was foreign to Zarathushtra's cult (and we shall see further on that the Persian prohibition affected early

¹ Cf. *Indische Studien*, v, pp. 148-9. For other discussions of this famous passage see the *Journal of the Bombay Branch of the Royal Asiatic Society* for 1885 (articles by Professor Peterson and Sir R. G. Bhandarkar) and Bhandarkar's *Date of Patañjali*, No. ii (Bombay, 1885).

Buddhism as well), but, for all that, *decorative* figures of both gods and men were wrought in ancient Persia, and, being wrought, were doubtless bought and sold in ordinary commerce.

Does not this give us the long-sought answer to the riddle of Patañjali's remark? If so, then *Maurya* indeed meant Mervian, and the application of the term to the familiar dynasty is nothing but a later specification of meaning. It was an ethnic or territorial designation, like the Pathan or Mughal of more recent history, and not a personal or a family name.

The very examples given of the commercial figures which the Mauryas made support this view, for are not figures of horses and chariots, *aśvakāḥ* and *rathakāḥ*, peculiarly appropriate for a Mervian people, in view of Maya's boasted skill in chariot-making? Chariots were a specialty of ancient Persia.

In perfect accord with the suggested foreign origin and import of the Mauryan name is the extraordinary infrequency of its occurrence in purely Hindu works. Apart from Buddhist literature and the *Mudrārākṣhaśa*, the word will be found, on examination, to be hardly quotable. It does not occur, as is commonly supposed, in the Kharavela inscription in the Hathigumpha Cave on Khandagiri. There is no *Moriya* in that epigraph at all. Indeed, the oldest dateable occurrence of the name that I can trace is in the Rudradāman inscription at Girnar; and this very fact would seem significant, for we shall see that Persian influence in this Farthest West is what we should expect, and was not Rudradāman a Mahākshatrapa himself? There was no racial reason here either to avoid or to obscure a Persian name.

Apart from the new evidences I have just adduced, the first explanation which might have occurred to one, of the aversion to the Mauryas implied by the silence of the Hindu books in regard to them, is the fact that Aśoka

was a Buddhist. This may indeed have had something to do with it. But, if Buddhism had been, as we have been taught to believe, a mere sect of Hinduism (which we shall see, further on, that it was *not*), the circumstance of Aśoka's conversion would in no way have sufficed to explain the conspiracy of silence on the Hindu part. And in no case could it explain the absence of Hindu pride in Chandragupta.

Chandragupta certainly was not a Buddhist, and, as the first great Indian emperor we should not have been surprised to find him deified, and, in course of time, identified with Viṣṇu or with Śiva. Such would have been the usual course, if he had been a Hindu. But that the blight of silence and partial oblivion should have fallen on him and all his house is a circumstance so singular as to be necessarily suggestive.

The vaunting boasts of the succeeding Brahmanical dynasty, the Śungas, that they had freed the earth from its low-born oppressors, is in perfect harmony with all these other points, and, when we remember what is said in the *Rājatarāṅgiṇī* of the fifty-two nameless and fameless kings¹ of early days whose praises no poet could be hired to sing, and when we observe the incredible fact that the great Aśoka seems to be among these infamous monarchs, we see at last that there is ample room for our suspicion.

When and where does Chandragupta Maurya first appear on our historical horizon? Appropriately enough, in the far north-west, somewhere near or at Taxila, and in company with Alexander, as this conqueror comes out of Persia. Was Chandragupta possibly among his host? A notice in Plutarch would seem to suggest it, and it is not impossible. What is known with some certainty is that after Alexander's death, when Chandragupta marched on Magadha, it was with a largely Persian army that he

¹ Cf. Lassen's *Ind. Alt.*, i, 573.

won the throne. The testimony of the *Mudrārākṣhaśa* is explicit on this point, and we have no reason to doubt its accuracy in a matter of this kind.

Having so swept on Magadha from the frontier over against Persia, and having overthrown his kinsman, the last Nanda, with this Persian host of his, he then proceeds to build himself palaces directly modelled on Persepolis. He fills these palaces with images of foreign type, and decorates them in the Persian fashion. He organizes his court along purely Persian lines, and pays regard to Persian ceremonial down to the washing of his royal hair. The script he introduces is of Achæmenian origin; the inscriptions of his grandson still imitate Darius's. His very masons are imported Persians, for whom the monarch has such marked regard that he ordains a special set of penalties for all who injure them, while they so link the name of Ahura Mazda with the Mauryan palaces that it still echoes down the ages to our day as the Asura Maya. Nay, more, we find that Chandragupta even weds the daughter of Seleukos, the very king who ruled the realm of Persia in those days. Would not all this be easier to understand, if Chandragupta Maurya were a Persian?

Two points at once occur to one as throwing doubt upon this supposition. One is the personality of Chāṇakya, the Brahman minister to whose craft and guile the invading Maurya is said to owe so much of his success, and the other the reputed connexion between Chandragupta and the last house of Nanda. A consideration of these points, however, will but tend to confirm our first suspicion.

The relationship with Nanda constitutes no sort of difficulty. Mr. Jayaswal maintains,¹ with reason, that the expression *Nava Nanda* does not mean "Nine Nandas", but "New Nandas", and that it refers only

¹ In the *Bankipore Express* for February 28, 1914, p. 5.

to the last two monarchs of this name. It may be true that the earlier Nandas were good Hindus, but all authorities agree in putting a great gulf between these ancient kings and the low upstarts who succeeded them. The latter were hated cordially, and is it not recorded that they exterminated all the Kshatriyas? If they were Persian invaders, this is sensible enough. If they were Hindu Kshatriyas themselves, the thing is unintelligible. Let us remember also that these baser Nandas were distinguished for their wealth. We shall see later that, if there were Persian rulers in this land at all, they came as merchant princes first, and won their empire as the English did. Is not great wealth an appropriate attribute? And let us not forget that the Nandas have suffered an even more marked blight in Hindu story than the Mauryas. Vincent Smith discusses this at length, and comes to the conclusion that there must have been some very striking reason for the perversity and obscurity of our traditions of this house. Does racial hatred in this case as well supply the explanation? At all events, the last two Nandas and the Mauryas are evidently both alike in high disfavour with the Hindus, and the recorded connexion in race between the two is thus no argument against me.

The case of Chanakya is more interesting. He, too, appears on our horizon in Taxila, where, I am told, he is found practising medicine, when the curtain lifts. For a Brahman of his distinguished rank these are suspicious circumstances. Medicine, although (let us note) particularly associated with the Magians, has never found much honour in the East, and Brahmans in the far north-west are notoriously unorthodox in general. But may not this name of Brahman mislead us in his case? Let us examine his *Arthaśāstra*, to see what manner of Brahman he has been. The very dedication of the work arrests attention. Śukra and

Bṛhaspati are the divinities. This is encouraging, at least, for there is a distinctly astrological flavour about dedications to Venus and Jupiter, and the ancient Persian priests were nothing if not astrologers. Note, then, the order in which he names the sciences: "Anvikshikī, the triple Vedas, Vārttā (agriculture or business generally), and Government." Does an orthodox Hindu Brahman give precedence to anything before the triple Vedas?

And what does he mean by this Anvikshikī, which takes precedence of the Vedas? Fortunately, he defines it for us clearly, and we find that it comprises Sāṅkhyā, Yoga, and Lokāyata, the last of which the translator thinks means Atheism. If this be right, Chāṇakya's orthodoxy is impugned at once. But, even waiving this, the prominence given to Yoga is most significant. I need not labour the point that Yoga practices are more akin to ancient Magian mummeries than anything else in modern India.

The fact that Chāṇakya names astronomy among the Vedāṅgas is not significant, as all authors do, apparently. But we may note in this connexion that the astronomical treatise in question is said to be of later date than are the other members of the group, and it is not impossible that in its origin it, too, goes back to Persian influence. But I anticipate. More useful for our present purpose is the account which Chāṇakya gives us of the course of training imparted to state orphans under his régime. The passage in question occurs at the beginning of chapter xii (p. 22 of the revised translation), and reads as follows:—

"Those orphans who are to be necessarily fed by the State and are put to study science, palmistry, sorcery, the duties of the various orders of religious life, legerdemain, and the reading of omens and augury . . ."

Does this bear much resemblance to the curriculum of any state orphan asylum otherwise recorded? Hardly,

I should imagine; nor is it easy to conceive of any ordinary Hindu instituting such a system. But it would be reasonable enough for a Magian Minister of State.

But it would extend this paper to cyclopædic lengths to pursue this quest for pregnant notices in Kautilya's pages. It will suffice to cite one other passage, which may lead us to a wider aspect of the subject. In chapter ix (trans., p. 17) Chāṇakya's enumeration of the qualifications of the king's high-priest are most significant—

"Him whose family and character are highly spoken of, who is well educated in the Vedas and the six Angas, is skilful in reading portents providential or accidental, is well-versed in the science of government, and who is obedient and who can prevent calamities providential or human by performing such expiatory rites as are prescribed in the Atharva-veda, the king shall employ as high-priest. As a student his teacher, a son his father, and a servant his master, the king shall follow him."

It is sufficiently obvious that Chāṇakya would not have counselled abject submission on the part of the monarch to his Atharvan Purohita, had he not been an Atharvan himself. Indeed, I believe it is generally known that the Purohita should belong to this special class of priests. But why? This prominence of the Atharvan priest at court and the subjection of the king to him is not what one might reasonably expect. It seems strangely out of keeping with the relative positions of the Atharva and the other Vedas in Hindu estimation.

But is it not possible that in this very inferiority of the Atharva among the Vedas we may find our clue? It is pre-eminently the Veda of magic, and it is obvious that, if there ever were in early India kings of Persian race who brought their own priests with them, such fragments of their rites and ceremonies as were destined to be preserved in India ought to be sought in this

Atharva-veda.¹ If, again, the first imperial rulers of India were Persians, it is not strange that this otherwise singular pre-eminence at court was gained by the Atharvan priesthood. They in that case would be found to be really Magians, in part, brought in the train of the invader, and, through race affinity and cognate beliefs and similarity of practices, recognized by Hindus to be Brahmans, to be sure, but Brahmans with a difference, inferior to themselves. This inferiority, however, would not affect them in the royal eye. On the contrary, they were the king's native priests, his fellow-countrymen, whose magic arts protected him, and to whose sorcery, no doubt, he had been taught to think he owed his empire, indirectly. (Witness the Chāṇakya story altogether.) This tradition would soon establish itself, and soon no king, however purely Hindu in his race, would dare depose the Atharvan from his rank. Magic is a dangerous thing to antagonize among a people who believe in it. This would seem adequately to explain the otherwise curious fact that the Purohita in India is regularly an Atharvan priest. Does any evidence exist corroborative of this theory?

I think it does. For let us remember at this point that the name of the *Atharva-veda* is a twofold one—*Atharvāṅgirasas* we find it called. Both elements in this compound name, it will be recognized, are equally good Persian. As evidence for the point I wish to make, this is, as it were, an embarrassment of riches, for it is not reasonable to suppose that the entire Veda is of Persian origin. What is consonant with all existing knowledge is the assumption that it is a mixture, or a blend, of imported Magian doctrines with those other similar and harmonious beliefs which the Magians found

¹ For a possible allusion in the *Atharva-veda* to Parsi funeral customs cf. Macdonell & Keith, *Vedic Index*, s.v. *Agni-dagdha* (vol. i, p. 8); see also s.v. *dharma*, i, 395.

among the Hindus of their time. There may have been a certain jealousy and friction between the rival schools at first (indeed, there appears to be some evidence of this, as we shall see), but, as the Magi grew acclimatized, community of interests will have fused the two.

But a way out of the embarrassment which I have mentioned is afforded us by a statement in the *Vishṇu-purāṇa* to the effect that the Angirasa is one of the Vedas in Śāka-dwīpa, i.e. it is a Persian scripture. The warrior-caste in Śāka-dwīpa, curiously enough, are known as Māgadha! The Brahmans are called Magas and the Kshatriyas Māgadhas (note that the Purāṇa recognizes the Magas as Brahmans, à propos of Chāṇakya), and *māgadha* in Sanskrit means not only a resident of Magadha, but therefore also Persian "warrior-" and "half-caste" (*mischlings-kaste*). This does not seem like accident.

But what do we know of this name "Magadha"? It seems to have no Sanskrit etymology. Is it original in India? Or is it *very* ancient? No proof whatever is forthcoming for either of these propositions. The oldest occurrence of the word which I can trace is in the *Atharva-veda* itself, in a passage suggestive of that early friction I have mentioned. In this passage, as is generally the case in Sanskrit writings, the Māgadhas are spoken of contemptuously, and, let us note particularly, in close connexion with the Bāhlikas. Professor Bloomfield's caution not to attach importance to these ethnic names appears to me unnecessary. The grouping is a common one both in the Purāṇas and the Epos, and we shall be ill-advised, if we do not value its significance. It is all in perfect accord, furthermore, with what we are told of Magadha in the *Prabodhacandrodaya*, where this country is named among those "inhabited mostly by foreigners", the *mlecchaprāyā janapadāḥ*. The date of this document need not concern us. The *Atharva-veda* is sufficient

proof that similar conditions prevailed also at the period of its composition. We may therefore look at last with more appreciative and discerning eyes upon a certain passage in the *Bhavishya-purāṇa* which puzzled Wilson rather seriously. On p. lxiv of the Preface to his *Vishṇu-purāṇa*, Wilson informs us that the last two-thirds of the *Bhavishya* "chiefly represent conversations between Kṛishṇa, his son Śāmba . . . Vasishṭha, Nārada and Vyāsa, upon the power and glory of the Sun, and the manner in which he is to be worshipped. There is some curious matter in the last chapters, relating to the Magas, silent worshippers of the Sun, from Śāka-dwīpa, as if the compiler had adopted the Persian term *Mugh* and connected the fire-worshippers of Iran with those of India. This is a subject, however", Wilson adds, "which requires further investigation."

The first step towards this requisite investigation Wilson himself subsequently took, the results of which are embodied in a note sent by Wilson to Père Reinaud, which Hall has, fortunately, printed among the Corrigenda in vol. v (pp. 381 ff.). This is so vital for my subject that I must quote from it extensively. Wilson writes—

"The last twelve or fourteen chapters of the *Bhavishya-purāṇa* are . . . dedicated to the tradition . . . which records the introduction of the worship of the Sun into the north-west of Hindustān by Śāmba the son of Kṛishṇa. This prince, having become a leper, through the imprecation of the irascible sage Durvāsas, whom he had offended, and despairing of a cure from human skill, resolved to retire into the forest, and apply himself to the adoration of Sūrya, of whose graciousness and power he had learned many marvellous instances from the sage Nārada. Having obtained the assent of Kṛishṇa, Śāmba departed from Dwārakā, and, proceeding from the northern bank of the Sindhu (Indus), he crossed the great river the Chandrabhāgā (the Chināb), to the celebrated grove of

Mitra (Mitravana),¹ where, by fasting, penance, and prayer, he acquired the favour of Sūrya, and was cleansed of his leprosy. By Sūrya's injunctions, and as a mark of his gratitude, Śāmba engaged to construct a temple of the Sun, and to found, in connexion with it, a city on the banks of the Chandrabhāgā. . . .

"After narrating these events, several chapters of the Purāṇa are occupied with the instructions communicated to Śāmba by Nārada, regarding the ceremonies to be observed in the construction of the temple and the daily worship of the image. Śāmba is desirous of retaining learned and pious Brahmans for the purpose of performing the appointed rites, and receiving the donations he may make to the Sun, but Nārada, in the spirit of the prohibition found in Manu against the performance of idol worship, as a source of emolument, by Brahmans, apprises Śāmba that no Brahman can undertake the office of ministering priest without incurring degradation in this life and punishment in the next. He therefore refers Śāmba to Gauramukha (white-face), the Purohita of Ugrasena, King of Mathurā, as the only person who could tell him whom he might most suitably employ as the officiating priests of the Sun; and Gauramukha directs him, in consequence, to invite the Magas to discharge the duty, as they are, in an especial degree, the worshippers of Sūrya. . . .

"Although Gauramukha could inform Śāmba what priests the prince ought to employ, he is represented as ignorant of the place where they dwelt, and, referring Śāmba again to the Sun, Sūrya desires him to repair to Śāka-dwīpa, beyond the sea of salt-water, in which region the Magas corresponded with the caste of Brahmans in Jambu-dwīpa or India. . . .

"In obedience to the commands of Sūrya, and with the help of Krishṇa, who lent him the use of Garuḍa for the journey, Śāmba went to Śāka-dwīpa, and induced eighteen families of Magas to return with him to India. . . .

"So far," Wilson says, "there is little in the legend, beyond the name Maga and the worship of the Sun, to

¹ Ought we not to write "grove of Mithra"?

suggest any connexion between it and the history of the fire-worshippers of Persia. But there are other particulars mentioned, which are of a more explicit tenour. They cannot, however, always be satisfactorily made out, in consequence of the obvious inaccuracy of the texts, arising in a great measure from the usual carelessness of the copyists, but partly from the occurrence of terms, probably ill-understood and imperfectly represented by the original writer, . . . yet enough may be extracted to establish the identity of the Magas of the *Parāpas* with the followers of Zoroaster."

The particulars which Wilson goes on to mention include: (1) the wearing or bearing of the *kūrcha*, a technicality of doubtful import; (2) the Maga custom of eating in silence; (3) their being termed *Vachārcha*, "Sun-worshippers"; (4) their having four Vedas, including the *Angirasa*; (5) the use of the *Avyanga*, or Parsi girdle; (6) their use of the *Varsma* or *Varsama* as *pavitra* instead of the *Darbha*; (7) the prohibition of touching the dead; (8) also of casting a dead dog on the ground; (9) the necessity of worshipping the Sun just before death. Furthermore, a Maga "should let his beard grow, should travel on foot, cover his face in worshipping, and hold what is called the *pūrṇaka* in the right hand and the *śankha* (conch-shell ?) in the left; and he should worship the Sun at the three *Sandhyās* and at the five festivals".

These details, Wilson justly concludes, "are more than enough to establish the fact that the *Bhavishya-purāna* intends, by Magas, the Mughs of the Persians, the Magi of the Greeks, and the Parsees of India."

Before considering any of the various points of interest in this invaluable notice, let us compare it with what Buchanan-Hamilton wrote, independently, of the *Gaya District* in 1812. "The Magas," we read, "are supposed to have introduced the worship of the Sun, and there are

many traces to show that the worship of this luminary is here of great antiquity."

Mr. Oldham, the present Commissioner of Patna, calls my attention, in this connexion, to the Gayāsura legend, and points out that whereas Rajendralala Mitra thought to see in it an allegory representing the victory of Brahmanism over Buddhism, it may well be that on the contrary it contains an echo of some struggle between the Indian Brahmans and the domiciled Magians. At all events, it must be conceded that it is abundantly established that the Magi did come into India in early times, and that Magadha was their main centre. Wilson, led astray by his unfortunate misconception in regard to the date of the Purāṇas, missed the whole fruitage of his keen researches by supposing the reference to be to the modern Parsis after their flight to India in the eighth century. But it will be obvious as we go on that Parsi pre-eminence in India is no new growth of modern centuries.

Having seen that the Magian priesthood of the *Bhaviṣya-purāṇa* were, from local evidences, particularly centred in Magadha, let us return to a consideration of Wilson's note. There we are struck with several matters of high interest.

First, let us notice the person of Gauramukha, "the Pale-face," as the Indians of the West would style him. This obvious Magian, whose royal master was He-of-the-Direful-Army (Ugrasena), we notice lived in Mathurā, where at a later period the racially connected Parthians established themselves especially. We see further that it was from Dwārakā that Śāmba started out to fetch the Magas, and thus find that some, and perhaps most, of the Śākas in *ancient* India came thither, not by land through the Punjab, but "across the sea of salt-water", as the Purāṇa says explicitly. This gives us, then, three centres for the Magians in ancient times—

Magadha, Mathurā, and Guzerāt. We shall see later that this is not only otherwise substantiated,¹ but that at least one other noted centre must be added to the list, and that collectively a high significance attaches to them.

We observe also the singular fact that the vehicle by which these Magi entered India was Garuḍa. Singular fact, I say, but is it unexpected? Long before I found this note of Wilson's I had been impressed, as an archaeologist, with the striking iconographical resemblance between the sculptured images of Garuḍa in India and the customary figure of Ahura Mazda in ancient Persian art.² Having observed this independently, I was gratified to find my budding suspicion confirmed by so significant a text as the *Vendidad*, where we read—

"I invoke the Garō-nmānem, the abode of Ahura Mazda," etc.³

On looking to see whether perchance my theory was wrong on chronological grounds, I found that the oldest recorded notice of Garuḍa's name in India is in the *Taittirīya Āraṇyaka*, x, 1, 6. But this is not disturbing. On the contrary, Max Müller shows that this *Āraṇyaka* "represents the latest period in the development of the Vedic religion, and shows a strong admixture of post-Vedic ideas and names".⁴ This, then, is highly satisfactory, as giving us precisely the period otherwise indicated for the introduction of the figure. Nay, more, is not the very geography of the *Āraṇyakas* in keeping? They are

¹ Cf. footnote on p. 440, also footnote 1 on p. 392 of Hopkins's *Great Epic*, where he observes that "the great architecture of Mathurā is also ascribed to superhuman power".

² "[Ahura Mazda] ist als eine bärtige männliche Figur dargestellt innerhalb eines Kreises, der mit Flügeln versehen ist und an welchen zwei Bänder herabhängen" (Spiegel, *Iranische Alterthumskunde*, vol. ii, p. 24, wherein it is pointed out that the figure is of Babylonian origin). Cf. also the figures published by J. de Morgan, *Mission Scientifique en Perse*, vol. iv, p. 323, to which Dr. Thomas draws my attention.

³ Fargard xix, ii, a, in SBE., vol. iv, p. 221; cf. *Skt. Garudmant* (Rig-Veda).

⁴ *History of Ancient Sanskrit Literature*, reprint by Pāṇini Office, Allahabad, p. 171.

centred especially in North Behar, in what was once the border-land of Magadha.¹

At about this point of my researches I found the note by Wilson on the Magas, and obtained definite Indian testimony to the connexion I had guessed. Imagine, therefore, my sensations on reading in the preface to the *Vishnu-purāṇa* (p. lxxxiv) Wilson's opinion that the contents of the *Garuḍa-purāṇa* show nothing which could justify the name, as it deals mainly with sun-worship, astrology, medicine, etc. ! Wilson, indeed, appears to have thought the name misplaced in connexion with this Purāṇa altogether, and to suspect that the original text called by the name of Garuḍa has now been lost. Could anything better illustrate the utility of this present study ? We now see that the name *Garuḍa-purāṇa* is the one and only right one for the text before us. The document is one of local Indo-Zoroastrian origin.

We also see that the Purāṇas as a class contain much more historical material of value than has been conceded. We must discuss some of these matters further on, but for the present we may note the fact that, when the *Prabodhacandrodaya* tells us that Magadha was among the *Mlecchaprāyā janapadāḥ*, it tells us an important truth, and we can see now that the *Mlecchas* in question were some sort of Zoroastrian Persians from that vague Persian country known as Śāka-dwīpa. Our suspicions as to the possibility of Persian origin for Chandragupta and the later Nandas thus receives marked confirmation, and we can now follow more appreciatively what Hewitt

¹ In this connexion let me note the fact that according to the MBh. vi, 290, "Garuḍa lives south of Niṣadha, in the land of Hiraṇmaya, by the river Hiraṇvatī" (Fausböll, *Ind. Myth.*, p. 79). Does Hiraṇvatī here mean the River Sone ? The names, which are identical in meaning, may be compared with the synonymous name of the River Hiraṇyavati which the Buddha crossed when proceeding from Pāvā toward Kusinagara, on which journey we know that he passed Pāṭaliputra. Let me also note the connexion between Garuḍa and Sārya, and the seeming connexion with Mt. Meru also (Fausböll, *op. cit.*, p. 43).

wrote in the JRAS. nearly a quarter of a century ago¹: "It is in the country of Magadha and throughout Eastern India that the worship of the great mother, the mother earth, is most prevalent at the present day, and it was in the Kalinga country that the custom of human sacrifice, called the Meriah, lasted longest, and it was these sacrifices which were originally offered by the Maghas to their mother goddess Maghā"; then again: "But the worship of the great mother was also associated with matriarchal customs and the system of tribal rule . . . That similar customs existed in ancient Magadha we have undoubted proof, in the account of the court arrangements of Chandragupta, king of Magadha, which were recorded by Megasthenes. He describes the women as being more trusted than the men. They were the king's personal body-guards. They surrounded him when he went out to hunt, and joined in the sport, some from chariots, some from horses, and some from elephants. They also served as soldiers, clad in full armour." Then comes the important sentence: "In considering the significance of this account, we must remember that the great Chandragupta was not an Āryan king." Indeed, he was not, in the ordinary meaning of this word. That is to say, he was not descended directly from those Āryans who first invaded Northern India, and to whom we attribute rightly the *Rig-Veda*. He was, however, Āryan in the sense that all Persians are Āryans, but the wave of immigration or invasion which bore him Indiawards was a later wave than the original pro-ethnic one. In other words, Chandragupta was a Parsi, and his relation to the other Āryan Hindus of his day was precisely that of the modern Parsis to the Indian population of the present time.

Is not all this in perfect harmony with what Sir George Grierson tells us of the inner and the outer belt of Āryan

¹ JRAS., 1890, p. 431.

speech? Sir George says: "At an early period of the linguistic history of India there must have been two sets of Indo-Aryan—one the language of the midland, and the other the group of dialects forming the outer band." He shows that Oriya, Bengali, and Assamese are true outer-band languages, and that, curiously enough, the same form appears unexpectedly in Guzerat. We shall see that these are just those regions most directly under Magian dominance, for Bihar is included in the outer belt.

I find, therefore, that my researches, starting from the point of view of architecture and archæology, lead me to conclusions precisely similar to those reached by Sir George Grierson working along linguistic lines.

"But why," it will be asked immediately, "why is it, if Chandragupta was a Persian, that Megasthenes makes no mention of the fact?"

It is seldom easy to explain the silence of an ancient writer, but either one of two explanations might suffice in this particular case. Firstly, we must remember that, in point of fact, Megasthenes *has* practically told us, as it is. He shows us that every single detail of Chandragupta's court and government is purely Persian, and, when he wishes to compare his palaces, he draws comparison with those of Susa and Ecbatana. May it not be, perhaps, the fact was too notorious in his time to call for mention in explicit terms? On the other hand, it is also not impossible that by the time of Megasthenes the Persian element in Indian society had become so completely domiciled and so identified with the community that they were not looked upon as aliens in our modern sense. They must have been there several centuries, at least, as we shall see; and we should remember that the modern Parsis, despite the closeness of their community, are legally described as "natives of India" to-day.

As it is, he tells us that the Mauryas were called

Ἡπείωτες, and, even accepting the current explanation of this term that it means "Easterners" and is the Greek equivalent of *Prācyāh*, it is abundantly evident from Sanskrit literature that these people were in very many ways, and from early times, at variance with the Vedic Āryans. In the *Śatapatha Brāhmaṇa*, for example, they are said to be "of the Asura nature" (*āsuryāh Prācyāh*), while it is among these very people, according to Pāṇini, that several of those strange and heterodox tribes or sects or schools are named which, to Weber's confusion, are found figuring in the *Caruṇavyūha*. Weber points out¹ that this, the fifth *Parīśiṣṭa* to the *White Yajur Veda*, is a modern composition, agreeing word for word with the *Devī-purāṇa* in many places. Some of the older, more original Vedic schools had passed away at the time of its production, but, for all that, Weber writes of the text appreciatively, as providing us with at least a systematic account of what the Indians themselves still preserved of their Vedic schools in Paurāṇic times. But he seems puzzled by many of its notices—for example, that among the eighty-six divisions of the *Yajur Veda* twelve should be called by the name *Caraka*. This term, he says, means, in the *Śatapatha Brāhmaṇa*, "feindliche und ketzerische Lehrer." Furthermore, his real difficulties begin when these twelve are specified, and he reads (§ 12) *Carakā Hvarakāh Kathāh Prācyakathāh*, etc. He says he cannot trace any *Hvarakāh* elsewhere, but notes without comment that his otherwise most reliable authority reads *Āhvarakāh* or *Āhārakāh*! Various other of the subdivisions which follow are traceable only in the Pāṇinean gaṇa *Tanduli*,² which he notes is "zu den Prāñcas gehörig".

But should we not connect with all this the passage in the *Vishṇu-purāṇa*, book iii, chap. v, p. 54? Yājñavalkya is there described as having gained possession of

¹ *Indische Studien*, vol. iii, pp. 247 ff.

² Cf. Pāṇ. ii, 4. 61.

a text of the *Yajur Veda* which even his guru had not had, through the instrumentality of a prayer to Sūrya. The prayer is fortunately given, and a study of it suggests that it is couched in Zoroastrian terms, including that conception of Kāla, "Time," which Spiegel has shown¹ is absolutely un-Indian down to the period of the Epos, i.e. until the coming of the Magi, although this Spiegel did not know. In other words, it is clear that we are now, in the light of our present study, in a far better position both to edit and to estimate aright the text of the *Caranavyāha* than Weber was. We see quite plainly that in Paurāṇic times the domiciled Magians had so far identified themselves with the country of their adoption as to have won some share, seemingly given to them grudgingly, in even the *Yajur Veda*. They maintain the essentials of their Parsi character even here, however.

Are we to suppose, then, that, when the gaṇa *Tanvali* was drawn up as applicable to the Prācyas, this term had no Parsi signification to Pāṇini's mind? Were these foreigners merely "Easterners" to him?

In this connexion it will be appropriate to refer once more to the opinion expressed by Goldstücker in the Preface to the *Mānavakalpāsūtra*, that the word *Yavanānī*, as noted by Pāṇini, means "the writings of the Persians, and probably the cuneiform writing". Weber was seemingly in part justified in pointing out the difficulties of this use of the word *Yavana*, but much of Weber's argument is now beside the mark.² When we remember that the women in attendance on the king in early India are regularly known by this term, and when we connect with this fact the statement quoted

¹ "Ich wusste nicht, dass diese Lehre von der unendlichen Zeit in den Vedas irgend welche Anknüpfungspunkte hätte. Die Auffassung des Kāla in den epischen Gedichten würde solche freilich bieten, aber diese ist zu spät um hier berücksichtigt werden zu dürfen" (*Erdu. Alt.*, ii, p. 9).

² Cf. *Indische Studien*, vol. v, p. 17.

above from Hewitt that this matriarchal custom was tribal with the Magi, we shall see that Goldstücker was presumably right.

This will enable us to deal more sympathetically than Dr. Fleet has done¹ with the mention in the temple records of Jagannath to the effect that the Yavanas invaded Orissa between 538 and 421 B.C., and again in the period between 421 and 300 B.C.² When under the term Yavana we understand Zoroastrian tribes from some part of the Persian realm, these notices of the *Madla Panji* are seen to harmonize with all our other evidences. There are undoubtedly puerilities in its narrative, and Dr. Fleet is certainly right in warning us not to take the statements of these records on trust. Where, however, particular recorded notices square with the facts as otherwise established, there can be no objection to our recognition of their truth.

Without stopping to discuss afresh the much-quoted Pāṇinean sūtras iii, 2, 126, and iii, 2, 111, with the famous notice by Patañjali, I will now endeavour to present a bit of evidence on this mooted question of the word *Yavana* which I believe has not been brought to bear on this subject hitherto, and that is the nationality of the Yavana Bhagadatta, King of Prāgjyotisha.

The purely astrological significance of the word Prāgjyotisha is the first point which catches the attention. It is a very striking name; and, when we remember that the king is styled not only a Yavana (V.P., vol. v, p. 54) but also an Asura, and that he was the close ally of Kālayavana, a king from the shores of the western sea (loc. cit., p. 53), who with a great number of *mlecchus* attacked Kṛishṇa at Mathurā, at about the same time as the Asura Jarāsandha of Magadha did the same, we see that he falls into the same category with these other undoubted

¹ *Ep. Ind.*, vol. iii, p. 334.

² Cf. Hunter's *Orissa*, vol. i, p. 214.

Persians, and that Assam is to be added to the list of early Magian centres. The very name of this Yavana, "Bhagadatta," then becomes significant. For is not the Sanskrit *Bhaga* the equivalent of the old Persian word for God, namely *Baga*? Bhagadatta is thus the Sanskritization of a Parsi name which in pure Sanskrit would have read Devadatta, and we can see in this case with certainty that the term Yavana means Persian and emphatically not Greek.

These conclusions are further confirmed beyond all possibility of doubt by the picturesque legend recorded in the *Vishnu-purāṇa*, v, 88, of the attack on Prāgyjyotiṣha, made at Indra's request, by Hari. Complaints had been made that Bhagadatta requisitioned maidens in some wholesale and quite unpleasant fashion, and he was to be called to account for this. We are then informed that, when the palace was ultimately stormed, it was found to contain 16,100 damsels, and 21 lakhs of blooded horses from Kamboja, a land which Wilson locates "near the Pāradas and Pahlavas, on the confines of Persia."¹

This is a legend whose interpretation has been difficult hitherto. Is it not now intelligible? And does it not at last give us the answer to one of the most puzzling of our outstanding problems of Indian history and religion? Wilson observes in the Preface to his *Vishnu-purāṇa*, p. xl: "It is a singular and yet uninvestigated circumstance, that Assam, or at least the north-east of Bengal, seems to have been, in a great degree, the source from which the Tāntrika and Śākta corruptions of the religion of the Vedas and Purāṇas proceeded." It has, indeed, been hitherto and even up to the present time a "singular circumstance", one of those riddles to which no answer was forthcoming. But does it remain a riddle now, in the light of our present inquiry?

¹ *Vishnu-purāṇa*, vol. iii, p. 292.

We have already learned the undoubted truth that Bhagadatta was a Persian, and Prāgyyotisha a Magian settlement. Let us remember further that the most popular of goddesses among these Persians was the goddess Ishtar, whose peculiar association with the Magians in India has been noted above (p. 81). Are not the Tāntric system and the Śākta cult a development on Indian soil of the sympathetic magic rites in connexion with this goddess as the symbol of fertility which Jastrow tells of?¹ This unravels for us the whole mystery to which Wilson calls attention, and furthermore explains completely the "curious fact" mentioned to me by Mahāmahopādhyāya Haraprasād Shāstrī, that, according to his own researches, the Śāka-dwipin Brahmans were specially associated with this cult. This is a valuable bit of confirmatory evidence, for which I am much obliged to the Mahāmahopādhyāya. We may also note, as a point of interest, if not of large importance, that, according to the *Śabdakalpadrūma*, *kārcha*, a word whose original Zoroastrian usage we have seen above, is used in one of the Tantras as a name for the mystic syllable *hūm*.

Nor need the appearance of the invading Persians in Assam astonish us. Hewitt provides us with the useful notice² that "the Māgadhas were not only bards and religious priests, for their occupation is said in Manu to be trade.³ It was trade which brought them to India, and it was to secure the trade of the country that they placed their headquarters in a position which gave them the control of the Ganges and Jumna rivers, and which thus enabled them to rule India".

¹ Cf. Jastrow's *Religion of Babylonia and Assyria*, s.v. *Ishtar*.

² JRAS., April, 1890, p. 478.

³ Cf. footnote 2 on p. 374 of Jackson's *Persia Past and Present*: "The Zoroastrians in general appear to have an especial aptitude for business, and they appear rather to accept than to reject the designation 'Jews of the East' that is sometimes applied to them because of their commercial activity."

That this appreciation of the commercial and political importance of river systems was from earliest times a peculiar characteristic of the Zoroastrian Persians is well shown also by Spiegel, and this undoubtedly explains the occupation of Assam in addition to the valleys of the Jumna and the Ganges. Indeed, the account which Spiegel gives us of the situation of the Iranians in Bactria and Sogdiana is so strikingly applicable also to the Iranians in Eastern India that I cannot refrain from quoting it. Spiegel writes:—¹

“Dennoch mögen schon damals die Völkerverhältnisse in diesen Ländern ähnlich gewesen sein wie heutzutage: die Eränier als Kaufleute und Landbauer bildeten einen grossen oder auch den grössten Theil der sesshaften Bevölkerung, sie waren aber umschwärmt von Nomadenvölkern, die gewiss ebenso wie jetzt der Mehrzahl nach fremden Stammes waren. Die Eränier nannten diese Völker Çaka, und wir wissen von Herodot, dass die Eränier mit diesem Namen Völkerschaften bezeichneten, welche die Griechen Skythen nannten.² . . . Was aber in jenen alten Zeiten anders war als in der Gegenwart, das war das Verhältniss der verschiedenen Völkerschaften zu einander. Damals bildeten die Eränier nicht den unterworfenen Theil der Bevölkerung wie heutzutage, sondern den herrschenden, denn sie hatten nicht ein schwaches, verachtetes und gehasstes Reich hinter sich, wie dies das heutige Erän ist, sondern ein starkes und gefürchtetes, welches im wohlverstandenen Interesse sich der grossen Flüsse bemächtigt hatte und durch die Möglichkeit jenen zuchtlosen Völkern das Wasser abzuschneiden sich ihrer Unterwürfigkeit versichert halten konnten.”

This brings us to a consideration of the term Śaka, which both Herodotus and Dr. Fleet say means the

¹ *Iranische Alterthumskunde*, vol. i, p. 403.

² Her. vii, 64: “οι γάρ Πέρσαι πάντας τοὺς Σκύθας καλεῖσθαι Σάκας.”

Scythians. Both these authorities are surely right. But is it not clear that Śāka, or Śāka, did not always have this sense of Scythian in ancient India? Just as the name of Yavana applied to Bhagadatta shows us that this term was loosely used of Iranian invaders, so, too, the naming of Śāka-dwīpa as the home of the undoubtedly Zoroastrian Magi shows us that for long periods the term Śāka denominated Iranians, not Scythians at all.

This seems to have been one of the main reasons for our delay in apprehending the true inwardness of much in Indian writing. We have made the impossible demand upon Brahmanical literature of accuracy and precision in the use of ethnic terms. This really is not reasonable. How should a Paṇḍit tell the difference between a true Yavana and an Iranian from the same vague region? How expect him to differentiate between an Iranian from the Śāka land and a true Scythian? Such matters simply do not appeal to the Indian. Even to-day the English are called *farangī*, which everybody knows means a Frenchman, and the vaguest notions still prevail as to the content of the word *vilāyat*. All Europe is synonymous with England (or was before the War). Even the term *Mughal* has lost all definition of significance, and is applied, in Behar at least, to any wandering hawker from the general direction of Afghanistan. We must not expect precision in such matters from the Indian texts. Anyone from Śāka-dwīpa may be called a Śāka, obviously.¹ But we may rest assured that such as did come from this land in early times were members of the energetic ruling race and not nomadic tribesmen. They were Iranians, and not of Scythic blood.

The determination of this point is of the most far-reaching consequence. It shows us that Dr. Fleet was

¹ Even Herodotus uses the term *Σάκαι* "in more than one application", as Dr. Thomas shows (J.R.A.S., January, 1906, p. 182).

right in contending that there were no "Scythians" in the North of India in early times, and it also shows us who the Śakas were whose presence in Guzerat in early centuries Dr. Fleet admits.¹ But it shows us a great deal more besides. If it is significant that the oldest use of the word Magadha occurs in the *Atharva Veda*, the Veda of the Śāka Brahmins, is it not also significant that the literature which deals especially with Magadha constitutes the canon of the Śākya sage?

The linguistic explanation of this curious term Śākya we owe again to Dr. Fleet.² From śāka, this scholar shows us, we get by Pāṇini, iv, 2, 90, the lost form *Śākiya. Śākiya and Śākiya are Pali and mixed-dialect forms from this, and from these come our Śākya. This term, Dr. Fleet shows, means etymologically "the people of a country abounding in Śāka trees". Because of a certain legend Dr. Fleet, in common with all other scholars, then locates this people at Kapilavastu, the place of the Buddha's birth. The legend in question is of the highest interest, but before discussing it we must examine the position of this "Land of the Śāka-tree", the modern *sāl*.

In the *Vishṇu-purāṇa*, and again in the *Mahābhārata*,³ we find a description of that Śāka-dwīpa whence came the Magians, and we need not be surprised to learn that it too is characterized by, and takes its name from, a mighty *sāl*. Another singularity of the place which the epic records is that "there is no king there". The translator, Roy, adds a footnote to say that "Probably this mythical account embodies some vague tradition current in ancient India of some *republic* in Eastern Asia or Oceanic Asia (further east in the Pacific)". But why go to Eastern Asia, when Śāka-dwīpa lies to the west

¹ JRAS., October, 1905, p. 644.

² JRAS., January, 1906, p. 163.

³ V.P., vol. ii, pp. 198-200; *Mahābhārata*, bk. vi, Roy's trans., p. 38.

confessedly, and why postulate unknown republics when the Buddhist oligarchies lie at hand? Śāka-dwīpa is the original home of the Śākyas, as the etymology proclaims, and has not Hewitt told us of the tribal rule among the Magians?

That this suspected connexion between the Śākyas of Kapilavastu and the other Śāka-dwīpins is not based merely on the occurrence of the *sāl*-tree in both places is sufficiently proved by the legend of the Śākyas which Dr. Fleet quotes, but which hitherto has not been susceptible of explanation. It must be briefly recapitulated here.¹

Ambaṭṭha-rājan had five wives (and note that the names of three of these have astronomical significance). The eldest wife had four sons and five daughters. Then she died, and the king took to wife a new princess. When the latter's son was born the king was so delighted that he injudiciously granted his new wife a boon, whereupon she claimed the sovereignty for her own offspring. The sorrowing king was thus compelled to send his elder sons into exile. But they did not proceed alone. On the contrary, they took with them eight of their father's ministers, their own sisters, and an army, and set out toward the north. Here they ultimately came upon the sage Kapila on the shore of a lake surrounded by a forest of Śāka-trees, and here, with Kapila's permission, they settled and made their home. But in the absence of suitable wives in that locality, they found themselves compelled to wed their sisters. This act, curiously enough, appears to have delighted their father, for, when he heard of it, he exclaimed: *Sakyā vata bho rājakumārā, paramasakyā bho kumārā tī*, "Clever indeed are the princes, right clever the princes to be sure," the word for "clever" being *sakyā*.

¹ I quote from Weber, "Die Pali-Legende von der Entstehung des Śākya- und Koliya-Geschlechtes" (*Ind. Stud.*, vol. v, pp. 412 ff.).

Doubtless this has hitherto been looked upon as a merely childish and not particularly edifying bit of popular etymology. It is more than that. But to realize its ethnological significance we must refer to Zoroastrian usages. After Zoroaster's first revelation, when he set about preaching to the Kavis and the Karpans, there were four points which the new Prophet emphasized.¹ The fourth of these was *practising the next-of-kin marriage*. And that this was indeed customary is shown by the case of the great Vishtāspa himself, whose sister Hūtos was his queen as well—"according to Magian practice," Jackson adds.² What has hitherto seemed an unusually clumsy story is thus found to be in reality an ethnological document of surpassing importance. It shows unmistakably that the ancestors of the Buddha, the Śākyas of Kapilavastu, are not to be differentiated from the other Śāka-dwīpins, and that they were of Zoroastrian origin.³ I am not unmindful of the fact that this may seem at first a startling and improbable conclusion. We are not accustomed to think of Gautama Buddha as a Zoroastrian, at any stage of his career. The more the question is examined, however, the more this conclusion will be justified. Indeed, we are again provided with solutions for some of our most puzzling problems.

Has it ever been really clear, for example, to name one of the least of our problems first, why Gautama selected Gayā as a centre? Was it made really clear even in the law-courts recently how it happens that both the Brahmans and the Buddhists claim the temple? And above all, has it ever been at all intelligible what the author of the *Dabistān-i-Mazāhib* meant by saying that *the ancient Persians claim Gayā as a temple of their*

¹ Cf. A. V. W. Jackson's *Zoroaster*, p. 43.

² *Op. cit.*, p. 70, n. 4.

³ The *Mahābhārata* account of the Siddhas in Uttara-kuru (vi, 254) seemingly contains a reference both to sister-marriage and to Parsi funeral rites; cf. Fausbøll's *Ind. Myth.*, p. 167.

foundation, where Gywa [Kaiwān], or the planet Saturn, was worshipped?¹

Now all these points are intelligible and readily reconciled. Gayā was an early seat of Magian worship. Gautama, as a religious student, went thither as to the holy place of his own people, the Zoroastrians.² The Magian Brahmans, who did not accept his reforms, had held the spot sacred even before his time, and his followers naturally held it doubly sacred after him. The author of the *Dabistān* must unquestionably be right (such a statement is inconceivably a fiction), and the curious name as well as the complex circumstances of Gayā have at last found explanation.

But we are not dependent upon external facts to prove our theory. The subject is not an easy one, perhaps, but there are not wanting internal evidences in the Buddhist system, and more particularly in the Buddha story, to prove the Zoroastrian origin of both. To a student of the Buddha legend the reading of the life of Zoroaster, as told by Jackson and by Spiegel, is a wonderful experience, the more so if that student be familiar with Gandhāran iconography. It is hardly too much to say that many of the Gandhāra sculptures I have been privileged to find in frontier excavations, and which are now placed with Buddhist labels in the Peshāwar Museum, could be given Zoroastrian labels with almost equal suitability. As regards the cycle of the Nativity the resemblances are overwhelming in their multiplicity.

¹ For this extraordinarily interesting notice I am again indebted to Mr. Oldham, who quoted it to me from the MS. of Buchanan-Hamilton's work in the India Office Library, from a copy made by Professor Jackson, of Patna College. To the Maulvi Jamaluddin Muhammad I am obliged for a reference to pp. 52-3 in vol. i of *The Dabistan or School of Manners*, translated by Shea & Troyer, where claim is made to fire-temples at Dwārakā, Gayā, and Mathurā—a most significant group of centres.

² Note the frequency with which fire-temples are mentioned in the Buddha story.

In dealing with this subject, however, we need to proceed with the extreme of caution. There is hardly any branch of Eastern letters where more uncertainty prevails than in the field of Zoroastrian history and exegesis. The wide divergencies of view even among the best authorities are notorious, and perhaps nowhere is this difference of opinion more marked than in the field of Zoroastrian chronology. The fact that so much of the *Avesta* has been lost, and that the existing recension dates only from Sassanian times, introduces an element of uncertainty into all chronological computations, and it has hitherto been a difficult, if not impossible, task to determine which elements in the Zarathushtra story are really ancient and which of more modern growth. It is stated that the personality of the Persian Prophet as deducible from the ancient Gāthās differs altogether from the miraculous figure of the later Avestan writings. When to this is added the fact that the *Spend Nask*, which did contain the story of his birth and childhood, has been lost, and that for most of our details we are dependent upon the *Zāt-spāram*, the *Shāh Nāmāh*, and even so late a work as the *Zartusht Nāmāh* (a work of the thirteenth century), the uncertain nature of the ground under our feet becomes apparent. It appears, so far as a person unversed in Zoroastrian studies can decide, impossible to determine, from Iranian sources only, the antiquity of many of the recorded traditions. Those in the *Avesta* itself have *a priori* claims to greater age, but even here, since the extent of alteration that may have been introduced in the Sassanian revision is unknown, the real age of the various stories is a matter of uncertainty.

It is essential to remember this if we are to understand why it is that the conclusions I now advance have not been drawn before. Resemblances in detail between the story of Zarathushtra and that of Gautama the

Buddha have been observed by all writers on the subject. Indeed, they are too obvious to be missed. But Spiegel, for example, commenting on these, pointed to the Buddhist rule in ancient Bactria in the early Christian centuries, and expressed the opinion that such elements as are common to the two traditions crept into the Persian story from this source and at this period.

This is so simple and seemingly sufficient an explanation of the known coincidences that it is no wonder it has been generally accepted. We must bear in mind that hitherto the Śākya legend told above has not been intelligible in its ethnological significance, and that we have had no clear evidence of specifically Persian dominance in India to arouse suspicion of the truth. I shall have failed in the object of my present paper if the situation is not now an altered one. We see more clearly than before that the Magian tradition preserved in the Purāṇas is essentially historic. We find the ethnology of the Śākya legend harmonious with our other evidences, and, thanks to Dr. Fleet, we are now in a position to see that the name Śākya means historically Iranian. Does this not alter all the situation?

I may be pardoned if I think it does. And yet I would not deny that Spiegel's view is also right, in certain special instances. He cites the story of the Cypress of Kishmir, which Zarathushtra is said to have planted before the fire-temple and inscribed with a notice of Vishtāspa's conversion, as a parallel to, and echo of, the bo-tree at Bodh-Gayā. Inasmuch as he shows that the cypress was not a sacred tree to Zoroastrians ("except in the west," where Jackson tells us Zoroaster of a certainty was born), and, moreover, that the description given of it is inapplicable to all but Indian banyans, he is presumably, in this case, right. And yet even here may I not justly note the fact that the bo-tree at Bodh-Gayā is not a banyan-tree?

But it is important to observe that even Spiegel saw the fact that his suggested theory of borrowings from Bactria could not apply to all those points which the two religions have in common. His words are so significant that I must quote them in detail. Spiegel says: "Namentlich mit der Geschichte Çākya-munis scheint mir Aehnlichkeit zu bestehen, mit diesem hat Zoroaster die königliche Geburt gemein, das Hervortreten übernatürlicher Fähigkeiten in seiner Jugend, endlich den Umstand, dass er seinen Beruf als Lehrer mit dem dreissigsten Jahre antritt. Dagegen erinnert die Uebernahme des Prophtenamtes, sein unmittelbarer Verkehr mit der Gottheit mehr an Moses und die semitische Gesetzgebung, namentlich in der Form, wie Chrysostomus uns die Erzählung überliefert hat. Ja selbst zwischen dem 19 Capitel des Vendidad und der Versuchungsgeschichte bei Matthäus hat man schon Aehnlichkeit entdeckt, hier lässt sich allerdings auch noch eine buddhistische Parallele finden, nämlich in den Versuchungen, denen Çākya-muni durch den Māra ausgesetzt ist, *doch scheint hier der Buddhismus der entlenende Theil zu sein*. Wir können natürlich hier auf diese Berührungspunkte bloß hinweisen, sie würden aber nach unserer Ansicht eine eingehendere Betrachtung wohl verdienen."

When so profound a scholar as Spiegel recognizes that one of the oldest and most authentic legends of Gautama goes back to Zoroastrian sources, and acknowledges that the subject is one requiring further study, we see that the situation is less simple than at first appears. Let me then attempt to make that further study which Spiegel recommends. Although not an Avestan scholar, I may be able to adduce in evidence material from one field, at least, which is not accessible to the Iranian specialist; I mean the field of Buddhist iconography.

If it can be shown that legends common both to

Zarathushtra and to Buddha display an older form in Persia, and if the Buddhist bas-reliefs depict these legends in developed, Indianized form, from which the Persian story could not spring, it will be clear that in their origin these common elements were Zoroastrian. If, moreover, this is found to be the case with any preponderating portion of the Buddha story, and even to hold good in regard to leading doctrines of the faith, we need not hesitate to interpret all these facts in connexion with the Persian title "*Śākya-muni*" (meaning the *Iranian Sage*), and the ethnologically Zoroastrian tale of how his ancestors observed the Magian rite of sister-marriage.

A conclusion of this kind will doubtless incidentally involve an earlier dating of the "*Late Avesta*" than is customary. But this will only mean that in Sassanian times the collection and recension of the sacred texts was done more honestly than we suppose. But why should we assume that the Sassanians were less desirous of a pure tradition than other sectaries? The pushing back of these Avestan legends may in turn make the accepted date for Zoroaster seem untenable. But is it, on the face of it, conceivable that, if he had really lived 600 years B.C., the old Greek writers could so have lost historical perspective, as they have, admittedly? Geldner himself once held that Zoroaster lived one thousand years B.C. Is it not possible that this, his earlier estimate, was right?

But these are matters of Iranian scholarship, with which I am not qualified to deal. Let me return to the more narrow subject now in hand, and do what is possible for me, with my limitations, to test these various points of contact.

At the outset of our inquiry let me note the Avestan doctrine of the passing on from ruler to ruler and from saint to saint of the divine, sacerdotal, and kingly glory. Compare with this the theory of the previous Buddhas in conjunction with the Chakravartin

idea, and recall the fact that the physical characteristics of a universal Buddha are identical with those of a universal monarch.

"In the Avestan Gāthās and in Pāhlayī literature the soul of the mythical primeval bull, three thousand years before the revelation of the religion, beholds a vision in heaven of the *fravaši* or ideal image of the prophet Zarathustra, Zarātūst that is to be."¹ Compare this with the sculptures depicting the *fravaši* of Gautama in the Tushita Heaven, prior to descending into Māyā's womb, and let us not forget the fact that the Persian legend is quoted from the Gāthās, the oldest texts of the Avesta. Does this not suggest itself as the source from which the doctrine of the Bodhisattvas came? Gautama was a Bodhisattva at the time. It is an extraordinary thing, moreover, that Hvōvī, the third wife of Zoroaster, bore him no earthly children, "but," as Jackson puts it, "she is the noble consort from whom ultimately are descended the future millennial prophets."² Is not the root idea of these "future millennial prophets" closely analogous to the idea in the Bodhisattvas?

Let us remember also that not only did the spirit of Zoroaster dwell, before birth, in heaven, as did that of Gautama, but that this heaven was the region of "eternal light". Does not the very name "Amitābha" bear, etymologically, this very sense of "Boundless Light", and is this name otherwise susceptible of explanation? Witness also the name "Dīpankara" in this connexion. Does not this confirm our suspicion of a Persian origin for the Bodhisattva cult? Is not this teaching, in the oldest form known to us in India, already far too developed to have given rise itself to any such forms as we now find in Persia? And is it not also possible that the preference of Northern Buddhists for this cult was, in the first instance, due in part to racial

¹ Jackson's *Zoroaster*, p. 23.

² *Op. cit.*, p. 21.

reasons? If our suspicion, as a whole, is right, would it not have been natural that those converts to the Buddha's creed who were of Persian origin like himself would have been more prone to introduce and then develop a cult with whose essential principles they were conversant before their change of faith? We may be sure that it was only after the Buddha's death that the details of Zoroaster's life were associated with his name, and it must have been the Magian element in the Sangha that was responsible for this. These are the people to whom the Bodhisattva doctrine would be most natural. Is not perhaps the whole Mahāyāna system a development of this Magianizing tendency?¹ If so, its location in the north, among the peoples of Iranian stock in India, is now intelligible enough. To the more purely Hindu members of the faith, as well as to the Sangha of Ceylon, these doctrines did not make a like appeal. The racial reason for them failed.² This, to be sure, implies a higher antiquity for the Bodhisattvas than is universally accepted. But I am not alone, I think, in holding that in this matter

¹ Let me note the parallelism, on this theory, between the Mahāyāna and our own High Church. The very names *Mahā* and *Hīna*-yāna show curious correspondence to our terms *High* and *Low* Church.

² I doubt if the Mahāyānist forms in Java and Farther India are any argument against this theory. On the contrary, if, as I believe, the *Madia Panji* is correct in its assertion of a Yavana occupation of Orissa (with Yavans in the Zoroastrian sense), may we not now attach an added significance to the tradition which Hunter records for us in his *Orissa* of a conquest of Java from this quarter? As the Magians came into India by sea, and constituted the mercantile part of the population, they are just that element in Indian society which could most readily be credited with such an enterprise. My personal knowledge in this field is too limited for me to deal with the question in detail. But much that I have heard from Mr. Blagden suggests that an inquiry on the lines indicated would be well worth while. He tells me of so-called "Brahmans" in Kambodia, etc., possessed specifically of astrological skill and skill in building, and the Bodhisattva cult is much developed. May I not also note that the very name "Kambodia" seems reminiscent of that Persian borderland, *Kamboja*, whence came the horses of King Bhagadatta of Assam?

M. Foucher, strange as it may seem, is wrong. I firmly believe that in the Gandhāra school these figures are already differentiated, and it appears to me that incontrovertible evidence on the point exists. But this, unfortunately, is not the place where points like this can be discussed.¹

Reverting now to the legend of the mythical primeval bull, I would point out that even as regards the name of that other Buddhist heaven, the Trayastrimśa, "the Heaven of the Thirty-three Gods," this number thirty-three in application to the gods is also Zoroastrian. It occurs, to be sure, in the *Rig-Veda* also,² but in India the idea is less prominent in Hindu works than in the Buddhist. Among the Zoroastrians, however, it was of special currency. Compare the thirty-three forms of judicial ordeal sanctioned by Zarathushthra, and again the thirty-three inquiries propounded to the new Prophet by the Kavīgs and the Karaps of Vishtāspa's Court.³ These, it is plain, are points where it is inconceivable that borrowing from India could have taken place.

Let us now note further that the Glory aforementioned descends at the appointed time and enters the virgin body of Zoroaster's mother, where it abides for a protracted period, just as the spirit in Māyā's dream comes to her in the form of a white elephant, which is obviously a bit of local Indian colour, and points in the most convincing manner to the direction in which this tale has travelled.

"It is ordained in heaven, moreover, that this Glory shall be combined with the Guardian Spirit (*fravaši*) and the Material Body so as to produce from this three-fold

¹ The evidence referred to is a sculpture in the Pipon Collection in the Peshawar Museum. But I understand that an inscription recently found by Dr. Marshall at Taxila establishes the age of the Bodhisattva doctrine. Dr. Thomas tells me of another Kharoshthi inscription which does the same.

² Lassen, *Indische Alterthumskunde*, vol. i, p. 618.

³ Jackson, *op. cit.*, p. 61.

union the wonderful child."¹ Then, after the Glory has descended into the mother's womb, "the archangels Vohūman and Ashavahisht, descending from heaven, convey to earth another of the three elements, the Guardian Spirit, bearing it in the stem of a Hom-plant, the height of a man. Third, the Substantial Nature, or material essence, which completes the holy triad, is miraculously combined with the elements of milk, through the agency of water and the plants, or through the archangels Khūrdaṭ and Mūrdaṭ. The demons vainly seek to destroy this; but the milk is mixed with Hom and is drunk by the future prophet's parents."

Here the iconographical evidence is particularly instructive, as it shows us such Indian development and modification of these Parsi doctrines as to prove conclusively that the Zoroastrian is the older form, and that no suspicion can arise as to the common elements having been taken into Zoroastrianism at some late period in Bactria.

The archangels Vohūman and Ashavahisht are undoubtedly the archetypes of those hitherto incomprehensible figures of Brahma and Indra which loom so largely in all bas-reliefs of the birth of Buddha. Is it not possible that even the words Vohūman and Brahma are to be connected? If this were so, we could, then, see at last both how and why it happened that Brahma and Indra were in Indian art the prototypes of Avalokiteśvara and Maitreya Bodhisattvas. The point has been established by Foucher himself, though it was hardly capable of explanation heretofore. Now we perceive that in our sculptures Brahma is not the Indian god, but an echo of the Zoroastrian archangel Vohūman. The Brahma figure is thus naturally transitional between the archangel and the Bodhisattva.

"The stem of a Hom-plant the height of a man" has

¹ Cf. Jackson, *Zoroaster*, pp. 24-5.

evidently been transformed in the Indian story to the branch of the *sāl*-tree, which *Māyā* invariably grasps at the height of a man, in all these sculptures, and the fact that it is a *sāl*-tree is worthy of attention, with reference to the etymology of *Śākya*. Nor are we wanting even in the third element of the mystic triad; for are not *Khūrdaṭ* and *Mūrdaṭ* recognizable now as the prototypes of those two heavenly figures who accompany *Brahma* and *Indra* as they pour forth the water of heaven over the new-born *Buddha* in the so-called sculptures of the Bath?¹ And is it not particularly significant that among the legendary bas-reliefs of the *Gandhāra* school these scenes are sometimes shown in combination?² We see *Māyā* with one hand raised to grasp the branch, and *Indra* and *Brahma* standing by to receive the infant springing from her side, while elsewhere in the crowded composition the child again appears beneath the stream of heavenly water poured over him by the two figures above-mentioned. Are not these rare composite sculptures evidently reminiscent of the triune nature of the holy child according to the Zoroastrian story, and is it not possible that the tripod on which the infant stands refers to this? If so, there can be no possibility of doubt but that in this case the Magian doctrine is the older one, debased in India.

The divine light which shone around the house prior to Zoroaster's birth is echoed in the *Kathāsaritsāgara*, wherein the room in which a wonderful child is born is illuminated by a strange light.³ This could hardly have been depicted in sculpture any way, but the

¹ A propos of fig. 156 on p. 309 of his *L'Art Gréco-Bouddhique du Gandhāra* M. Foucher calls these figures "Deux autres personnages, sans doute divins", which he thinks are simply spectators who might be omitted. But, where individual figures seem meaningless in Gandhāran art, may we not suspect that the fault lies really with ourselves?

² Cf. Foucher, *op. cit.*, p. 413, fig. 209 (α).

³ This similarity has been pointed out by Jackson, *op. cit.*, p. 27, n. 4.

transference of the birth-scene to the Lumbini Garden makes the light-legend more or less incongruous in the Buddhist story. But is it reasonable to suppose that this idea could have been borrowed by the Persians from the *Kathāsaritsāgara*, or any of its sources even?

"In the Avesta all nature rejoices at Zoroaster's birth; . . . his fitness for the prophetic mission which he is to undertake is divinely recognized."¹ Does not all Nature do the same in the Pali story also, and is not the Buddha's fitness for his mission similarly recognized and acknowledged at the moment of the Enlightenment by that earth-goddess who, we have seen from Hewitt, was the mother-goddess of the Magians? Compare, too, the various attempts made to destroy the infant Zarathushtra with the analogous attempts on Prince Siddhārtha's life, and observe that here, too, the legends bear an Indianized form in India. Thus, where in Persia the infant is to be trampled by an ox, in India the prince is to be mangled by an elephant.

"Als Zoroaster sieben Jahre alt war, versuchten sich die Zauberer aufs Neue an ihm. Sie hofften, dass er wenigstens für Furcht und Schrecken nicht unempfindlich sein werde, und mit höllischen Zauberkünsten brachten sie schreckliche Erscheinungen hervor, vor welchen alle erschrocken die Flucht ergriffen, nur Zoroaster nicht."² Compare the "visions" of the youthful prince, Siddhārtha, which the gods contrived in order to turn his thoughts to the religious life. These, too, were "schreckliche Erscheinungen" of sickness, age, and death in loathsome forms.

"At the age of twenty the *Zāt-spāram* recounts that, 'abandoning worldly desires and laying hold of righteousness,' he departs from the house of his father and mother and wanders forth openly enquiring thus: 'Who is most desirous of righteousness, and most nourishing the

¹ Jackson, *Zoroaster*, p. 27.

² Spiegel, *Erden. Alt.*, vol. i, p. 691.

poor?"¹ Here, though, we must view the Persian story with suspicion. The *Zāt-spāram* is too late a work to quote for the original form of legends such as this, and the wording of the Parsi tale is too identical with the Buddhist to do anything but put us on our guard. In this case we may feel sure the story is a borrowing from India, a direct echo of the Buddhist one.

"At the age of thirty comes the divine light of revelation, and Zoroaster enters upon the true pathway of the faith. It is in this year that the archangel of Good Thought, Vohu Manah, appears unto Zarathushtra in a vision and leads his soul in holy trance into the presence of god, Ahura Mazda."² Did not the Buddha, too, receive Enlightenment at this same age of 30, and did he not shortly afterwards ascend into heaven to visit the soul of his departed mother?

Here, it appears to me, the situation is essentially different from that of the Great Renunciation legend. The Persian form bears every indication of consistency and true originality. The Buddhist version is an echo, but an echo with an Indian ring. The Buddhists did not wish, apparently, to forego the story of the heavenly journey, but, having discarded Ormuzd and all idea of God, they were compelled to modify the old original, in order to retain this element at all. Hence the weird subterfuge of Māyā's soul and her salvation. The Buddhist version is thus clearly a corruption of the Persian one, and therefore necessarily of later date. Observe, furthermore, that as soon as Zoroaster's revelation is complete comes his temptation by the fiends. Note specially the fact that this temptation is twofold, the temptation of power and the temptation of lust.

At the same point in the Buddha story we have the temptation of Māra, which again is a twofold trial by

¹ Jackson, *Zoroaster*, pp. 3-23.

² Jackson, *op. cit.*, p. 36.

power and lust, witness the sculptures where Mára's daughters appear.¹ It is in this connexion also that the Magian goddess of the earth appears most prominently. This is the Buddhist legend whose Zoroastrian origin Spiegel himself confessed, so here we have no reason to discuss it. But was Spiegel right in thinking this single borrowing from a Persian source unique in Buddhism? How could a single instance of this kind find explanation? And have we not seen abundantly that in most vital cases the borrowing has been this way?

To my mind, our original suspicion seems completely justified. The iconographical evidence, so far as I can see, establishes conclusively that the details of all the Buddha story, particularly in the Cycle of the Nativity, were brought into India before the Buddha's birth, and were then attached to his person with local adaptations, on his appearance in the rôle of the Enlightened One, though subsequently to his death, of course. This does not mean to imply that all the Magian elements in Buddhism are post-Buddha, still less does it raise any doubt as to the Persian race of Gautama. The title of *Iranian Sage* which Buddha bears, and the *Śākya* legend told above, are to be taken in conjunction with these internal evidences, and in such conjunction not only prove that Buddha was a Persian, but explain how the Persian legends were fittingly associated with his person, at a slightly later date. For we must bear in mind that India did not forget the Buddha's race and origin until the meaning of the word *Śākya* became obscured and lost. The *Buddas Scythianus* of Manichæan tradition proves this point. But *Scythianus* in application to the Buddha is analogous to *Americanus* in reference to George Washington. The one was no more a Scythian savage than the other a Red Indian.

¹ Dr. Thomas tells me that Kern has already sought to show that Mára is an Indian form of Ahrlman.

Another point of archæological interest which may now be held as settled is the singular and protracted unwillingness of the early Buddhists to manufacture graven images depicting the person of their Lord. It is not, as I once thought and as I stated in my Peshawar Handbook, because the figure was too sacred to be drawn. Neither is it, as Foucher thought, due to the simple fact that such was not *dastâr*. It must rather have been due to the old Persian prohibition of such images. Spiegel observes that the fact that Ahura Mazda was occasionally represented "ist sehr auffallend nach dem was uns Herodot von den Persern berichtet und ihrer Abneigung die Götter darzustellen".¹ Figures of Zoroaster are very rare to-day. Does this not show us why the Northern Buddhists waited for the Greeks to come before contriving statues of the Buddha? But is there not also much in the life of Aśoka which is now for the first time really clear? We can now understand, as never before, why his edicts echo those of Darius. We see whence came his thought of foreign missions, and of sending his son to Ceylon. Did not Vishtāspa first set the example? Was he not the first king in history to show this proselytizing zeal? Did he not lend state aid to an aspiring Prophet? Aśoka was apparently a conscious copy of the great Vishtāspa.

But, more vital than any of these matters, we now can understand Aśoka's change of faith. There was racial sympathy between himself and Gautama, *as the Dipavamsa has informed us all along*;² and racial sympathy in a foreign land is no small bond. Moreover, the Buddha's system is now seen to be an adaptation of the Magian faith to Indian conditions, a Hinduizing of the Parsi cult

¹ *Erden. Alt.*, vol. ii, p. 25.

² I quote Waddell's *Report*, p. 61, where we are told on the authority of Turnour that "the *Moriyan* was a branch of the *Sakyan* dynasty . . ." The passage in Beal's *Introd.* (p. xvii) to which reference was made above is confirmatory evidence for this connexion.

more thoroughgoing, doubtless, in its pristine form than the Magian element within the Sangha really liked—whence the non-Hindu cult of relic-worship, and, as time went on, the Magianizing Mahāyāna system. The Buddha disregarded caste, of course, for caste, in any rigid sense, is not a Parsi institution. At the same time he still showed reverence for “Brahmans”. These “Brahmans”, though, were Magi, in his case.¹

Buddhism, in other words, stands for the spiritual acclimatization of a section of the domiciled Iranians, and it is natural that in the third generation of the Persian Mauryas the emperor himself desired a closer identification with the people of his realm. We see the same phenomenon, also in the third generation, in the case of Akbar. As was the case with Akbar, too, Aśoka never was a Hindu, and could not have become one had he wished, because of caste. The only *rapprochement* possible for the Mughal emperor was through a wide eclecticism of his own. Aśoka was more favoured. Thanks to the ministry of that Gautama whom the *Avesta* rightly calls *The Heretic*² (a term whose force the modern world has overlooked), he was provided with a close approach through the then common ground of Buddhism, a cult of Parsi origin wherein both Magians and Hindus were united in one common fold.

The conversion of Aśoka is thus a symbol of his spiritual approach, through the only channel open to him, to the religious heart of the empire in which his fathers ruled as aliens. This then explains the spread of Buddhism as nothing has explained it hitherto. It was the Sikhism of ancient India, a spiritual compromise between the rulers and the ruled.

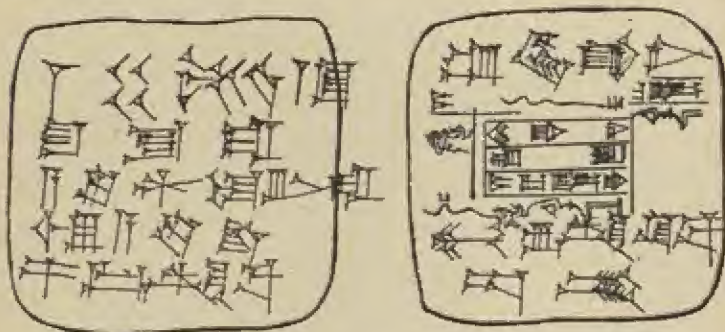
¹ Compare the frequent association in Gandhāra sculpture of these supposed Brahmins with fire-altars, and note the striking agreement between the so-called Brahmins in Gandhāra and the Magi as described in the Purāṇas.

² Cf. Moulton's *Early Zoroastrianism*, p. 115, n. 1.

SUMERIAN WOMEN FOR FIELD-WORK

BY THEOPHILUS G. PINCHES, LL.D.

THE tablet now published, which belongs to Mr. Alfred E. Knight, measures 42 mm. high by 42 mm. wide. Judging from its form and general appearance, it came from Jokha, the ruins of the city whose name is now generally read Umma.¹ The obverse has five lines of writing, and the reverse three with a space between the first and the second. Both sides are covered with impressions of the cylinder-seal of the scribe by whom the document is attested.



The following is a transcription of the text:—

OBSERVE

1. *Gi šuš nimir gin á gia-šu*
2. *šu - ur - ra*
3. *a-šag dingir Nin-ur-ra*
4. *u a-šag muru*
5. *pa Sur-d-En-zu*

¹ See, however, *The Berens Tablets*, 1915, p. viii.

REVERSE

6. *duba* *Azag-ga-ni*

(Here comes the scribe's cylinder-impression three times.)

7. *Mu ma d.En-ki ba-*8. *ab - du*

TRANSLATION

(1) 100 women for 1 day (2) cultivating (3) the field of the deity Nin-urra (4) and the field of the centre. (5) Official: Sur-Enzu, (6) scribe: Azagga-ni.


(7 and 8) Year (the king) launched the bark of Enki (the god Éa).


Impressions of the cylinder-seal of the scribe, Azagga-ni, cover almost the whole of the surface, both obverse and reverse. On the latter, they are arranged rather symmetrically, and we see that the scribe first impressed, right (bottom) and left (top), the image of the seated god which formed part of the design, and then obliterated the top of the former and the bottom of the latter by a third and very distinct impression of the three-line inscription containing the owner's name, office, and parentage. No attempt was made to reproduce the remainder of the picture, but a portion of the figure of the owner—the outline of his back—which is close to the inscription, is to be seen. These traces show that the design was the common one of the owner of the cylinder being led into the presence of his god. The inscription on the cylinder reads as follows:—

<i>Azag-ga-ni</i>	<i>Azagga-ni</i>
<i>dup-šara</i>	the scribe,
<i>dumu Sur-šag-ga</i>	son of Sur-šagga.

Šu-urra in the second line of the tablet apparently means "to stretch out the hand for the purpose of smoothing down", or the like. Cf. *West Asia Inscriptions*, iv, 19, 7-9: *šu-urra elā-bi himmanšee = ina mešit qāti-ša*

ellite lišapšaš-šu, "by the pressure of her holy hand may she relieve him," in which perhaps the idea of stroking and soothing is included. These women were probably employed to prepare the fields for cultivation. The meaning of "to destroy", which *šu-urra* (= *pašātu*) also has, would seem, therefore, to come from the erasure of an inscription on a clay tablet by smoothing it out with the upper end of the stylus, which was shaped for that purpose.

Of special interest is the fourth character in l. 4. This is the rare sign *utu-gunā*, "weighted *utu*," so called because made heavy with five horizontal wedges. The late form is apparently , as is implied by the early archaistic one (imperfectly preserved) in *Cuneiform Texts*, pt. xii, pl. 7, l. 29b. The character is there explained by *qablu*^m and *biritu*^m, words having the meaning of "middle", "centre". In the case of the field in question, however, some other meaning may be intended.

With regard to the value *murū*, this would seem to be a shortening of the word *murub*, values of , which from the number of the wedges would seem to have had what may be called a double-gunued form. If these two, the single-gunued (as in the present tablet) and the double-gunued, be, as is probable, the same character, the meaning in the above translation would seem to be the most acceptable. It is hardly likely that we have to adopt the alternative reading *nisag* (for *nig-sag*), "that which is head" (i.e. "first"), and render *ašag nisag* as "the principal field", as the character in question occurs elsewhere with the meaning of "medium" (quality).

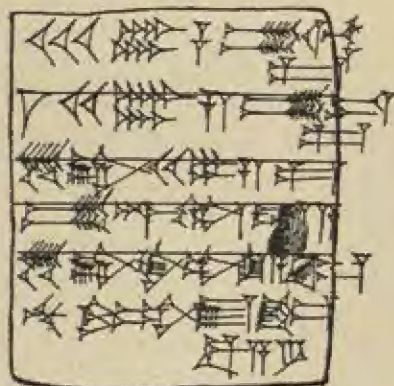
The lists available to me have not enabled me to identify the deity *Nin-urra*, but the meaning of the root *ura* seems to be "to bind, to ban, to curse, to reap", which are all connected ideas. It seems, therefore, not unlikely that some god of agriculture may be intended—perhaps *Ezinu*, the god of corn.

The colophon possibly gives one of the missing dates of the reign of Ibe-Sin, the last king of the dynasty of Ur of whose reign colophon-dates occur in any number. An Azagga-ni—probably the same man—is mentioned elsewhere as having delivered sheep to the temple in the year when Šaššurum was ravaged—the sixth date of Būr-Sin. This would be about fifteen years before the date of the present tablet, should it really belong, as suggested, to the reign of Ibe-Sin.

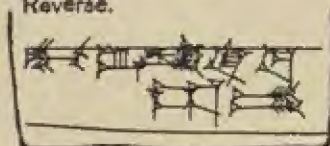
APPENDIX

I. *The Date*

The following text, which belongs to Mrs. Pinches, gives the date of Mr. Knight's tablet. It is a fine and boldly-written specimen measuring 50·5 mm. high by 43 mm. wide. Colour grey.



Reverse.



1. *Ušu-ussa mina šuš du seg
gur*
2. *Gi šuš niš ilima eš šuš du gin
gur*

3. *še-bi niš ia eš kuš gur*
4. *du bala-ta du-a*
5. *še-bi hur guda-šu a-ka*
6. *nu-banda gud-é-ne*
ba-a-gur

The upper part of the reverse is blank, the lower part has the date:

1. *Mu ma d.En-ki ba-*
ab-du.

TRANSLATION

(1) 38 *gur* 120 *qa* of (barley) plants, fine; (2) 89 *gur* 180 *qa* of (barley) plants, standard; (3) their grain 25 *gur* 180 *qa*. (4) Of the (barley) plants imported (?) there remains (5) their grain destined for the food of the oxen; (6) the cattle-overseers have stored it.

REVERSE

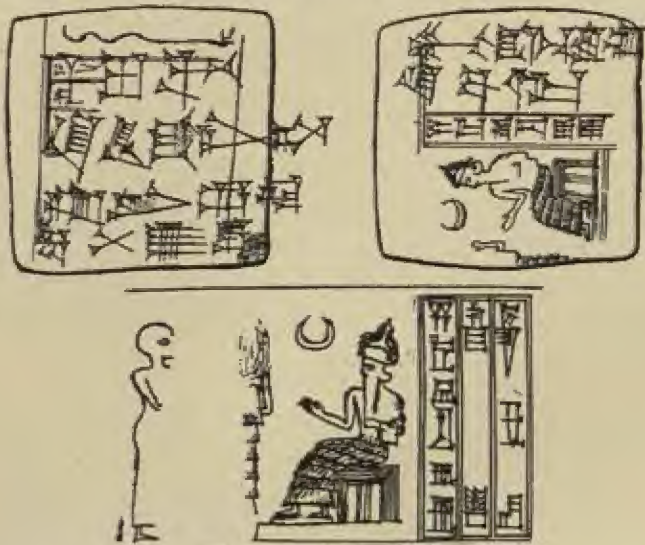
Year (the king) launched the bark of Enki.

The meaning of *du* in ll. 1, 2, and 4 is a general one, corresponding possibly with the English "vegetation". In my paper "Ancestor-Worship and the Deification of Kings", in the *Proceedings* of the Society for Biblical Archaeology for April and May, 1915, I have rendered *du* by "litter". This was based on the fact that the sheep offered in the temple of the gods of Jokha, pending sacrifice or other use, would need clean straw, or the like, for their proper maintenance. In this case the barley-stalks would be needed for the oxen in the care of the cattle-overseers, and probably the amount in the present list—large in comparison with the grain obtained from them—was not excessive, in view of the size of the animals, and, apparently, the great care taken of them.

The almost perfect preservation of this document implies that it was originally protected by an envelope, which has now disappeared.

II. *The Scribe Azagga-ni*

Herewith I give the text of the little tablet above referred to, which mentions a Sumerian named Azagga-ni. This document, which belongs to Mrs. Pinches, measures 35.5 mm. in height by a trifle less in width.



OVERSE

- | | |
|----------------------------|--------------------|
| 1. <i>Gi udu ba-bat</i> | 1 full-grown sheep |
| 2. <i>ki Azag-ga-ni-ta</i> | from Azagga-ni. |
| 3. <i>duba Lu-kal-la</i> | Seal of Lu-kalla. |
| 4. <i>iti kur-u-e</i> | Month Kur-u-e. |

REVERSE

- | | |
|-----------------------------|------------------------|
| 5. <i>mu Ša-aš-Šu-ru-um</i> | year (Bâr-Sin) ravaged |
| 6. <i>ki ba-hul.</i> | Šaššuru. |

Here comes the seal-impression of the scribe, Lu-kalla, with the common design in which the owner is led into the presence of the deity whom he worshipped. The three-line inscription is as follows:—

<i>Lu - kal - la</i>	Lu-kalla,
<i>dub - šara</i>	the scribe,
<i>dumu Sur-é-e-iš</i>	son of Sur-é-iš.

Each side has a single impression of this cylinder, but that on the reverse is the better of the two. We there see the god worshipped by Lu-kalla, seated on his panelled stool, with the divine introducer advancing and saluting him. Lu-kalla's figure appears on the obverse (to the right of the inscription). The only portion really wanting is that where the introducer is shown grasping the worshipper's left wrist with her right hand.¹

¹ See the *Babylonian Tablets of the Berens Collection*, pp. 31, 34.

XXI

EXAMPLES OF TIBETAN SEALS: SUPPLEMENTARY NOTE

By E. H. WALSH

IN my paper on Tibetan Seals in the last number of this Journal (JRAS., 1915, p. 1) I regret that, owing to there not being time for a second revision of the proof, on account of my being in India, there are certain misprints, which I correct below.

For 'abar in line 6 of the inscription of the seal on p. 7, read hbar.

For རྩ the top word of the third column of the seal on p. 8, read རྩ.


For མཆོད the second word in the same column, read མཆོད.


For འབད the bottom word in the sixth column of the above seal, read འབད.

These letters are correctly given in the transliteration of the seal on the same page.

The last letter on the seal of the Abbot of the Gyantse Monastery appears to be རྩ, which I took to be an unusual form of རྩ g. From further inquiries, however, I gather that the letter is meant for རྩ m, and is either a mistake in the cutting of the seal or a strangely clear misimpression of the seal. The last word is therefore dam, and stands for དམ་ཁ་, dam-kha, "a seal," similar to འཇམ་གཏུག་, tham-ka. The inscription is therefore "The seal of the Head Official of the dPal kKhor-Chhos-dDe Monastery".

The reading of the second column of the seal of the Jong-pöus of Gyantse which I have given on p. 12 as "rdzong" is not correct. I cannot think how the mistake

occurred. The word, which is correctly shown in the drawing of the seal on p. 11, is  *rtsa*, "official."

The form of the letter differs from that at the bottom of the second column of the Dalai Lama's Seal (Fig. 1 on the Plate) , but is the same as that in Dr. Francke's Ladakh block-print alphabet (JRAS., 1910, p. 1211). The inscription on the seal is, therefore, *rGyal-rtsa*, and stands for "*rGyal-Tse dzong rtsa thamka*", "The official seal of Gyantse Fort".

A *Dzong* in Tibet is not merely the fort, but a district, of which the fort is the headquarters of the administration under the *Jong-pöns* (*Dzong-pöns*).

With reference to the seal of the Khyab-ying, who is the Prime Minister of the Tashi Lama, referred to on p. 12, I have since received the reply of the Khyab-ying, which is that the seal is an old one, and he does not know the meaning of the characters.

Since I wrote the above paper, I have obtained, through the courtesy of the Rev. Father Felix, O.M.C., a copy of the Dalai Lama's seal, and also that of the *Mi-dbang*, the Regent of Lhasa, affixed to two documents of the year A.D. 1741, granted to the Capuchin Fathers at Lhasa, allowing them to preach freely the Christian religion, and allowing the Tibetans to embrace it unmolested. These documents have been described by the Rev. Father Felix in an article "On the Persian Farmans granted to the Jesuits by the Moghul Emperors, and Tibetan and Newari Farmans granted to the Capuchin Missionaries in Tibet and Nepal", in the *Journal of the Asiatic Society of Bengal*,¹ as follows:—

"II. The second category shows two Tibetan diplomas in 'Umin' or 'Umin chuk'² characters. The larger one



¹ JASB., vol. viii (s.s.), p. 325.

² དུམ་མེད་ or དུམ་མེད་ཆེན་

is of Mi-Vang, King of Tibet, at his residence of Kadem Khanzar, in the year of the Iron Bird, the 30th of the seventh moon, which corresponds to the 9th September, 1741, of the Christian era. The second is from the hand of the Dalai Lama, written and given at his great palace of Potala, the 28th of the first month of the star, called Thrumto,¹ in the year of the Iron Bird, which is according to our reckoning October 7th, 1751. Both these instruments were given by the King and the Dalai Lama to the Capuchin Fathers, and allowed them to preach freely the Christian Religion and their Tibetan subjects to embrace it unmolested. The original mandates are still preserved in the Archives of the Propaganda in Rome, where I found them written in a beautiful hand, on large yellow silk sheets, as is the custom at the Court of Lhasa. Both are duly authenticated with red-ink impressions of the seals of the King and the Dalai Lama."²

I would note that as both documents are dated in the same year, that of the Iron Bird, which corresponds to 1741 A.D., the date of 1751 A.D. assigned to the document granted by the Dalai Lama appears to be a mistake.

A reproduction of these seals is given below (p. 468). The seal of the Dalai Lama is interesting as being different from the seal at present in use, both in the size of the seal and in the inscription.

The inscription on the seal is the same as that on the seal of the Dalai Lama on a letter preserved in the archives of one of the noble families of Ladakh, an illustration of which has been given by Dr. Francke in JRAS., 1912, p. 747. The seal is, however, much larger than the one illustrated by Dr. Francke. The only difference in the characters on the two seals is the initial letter, which is  on Dr. Francke's seal and  on the present seal.

¹ ཁྲུམ་སྟེན་ *khruṃ-stod* or ཁྲུམ་སྟེན་ *khruṃ-stod*. The Twenty-fourth Constellation, corresponding to the seventh month.

² *Op. cit.*, p. 329.



Seal of the Dalai Lama on a permit to the Capuchin Monks at Lhasa in the year A.D. 1741.



The inscription is as follows :—

First column *rDo-rje hChhang*.

Second column *Ta-lai blamah*.

Third column *Yi-tham-ko rgyal*.

Namely: "The royal seal of *rDo-rje hChhang*,¹ Dalai Lama."

There is no final character  to fill up the column at the end of the seal after *rgyal*, which clearly shows that the  which occurs in the present seals of the Dalai Lama is not intended for *wa*, and the inscription is not "*rgyal wa*."

¹ *hDo-rje Chhang* is the Tibetan form of the Sanskrit Vajradhāra, the Bodhisattwa Reflex of the Celestial Buddha Akshobya. In Tibetan Buddhism, however, it is considered that he is the Reflex of Śākya Muni, and that he is the chief Celestial Buddha, and that he is incarnated in the Dalai Lama.

The document granted by the Regent of Lhasa to the Capuchins bears two seals, a smaller one at the head of the document and a larger one at the end.



Smaller seal of the Regent of Lhasa on a permit granted to the Capuchin Monks at Lhasa in the year 1741 A.D.

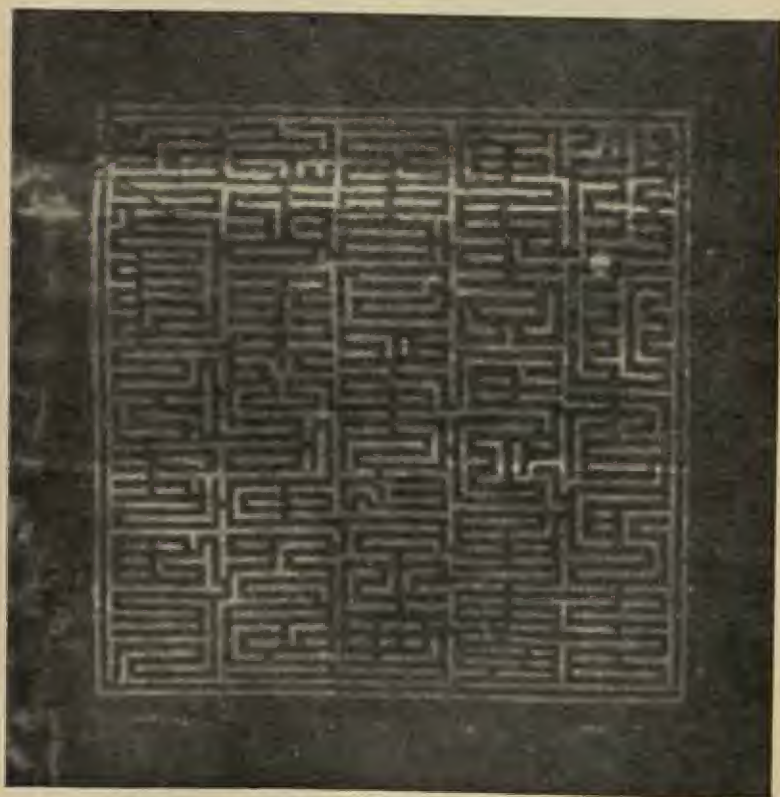
Inscription on the seal enlarged.

I am unable to attach any meaning to the characters on the smaller seal. The second character in the first column resembles *d* and the third *j*; the top character in the second column resembles *b*, the second *dz*, and the bottom one *r*. The top character in the third column resembles *th*, the penultimate character *ng*, and the bottom one *rd*. The other characters appear to be Mongolian seal characters or imitations of them.

The impression of the larger seal of the Regent of Lhasa (p. 470) is very clear. It appears to be in old Mongolian seal character, or an imitation of it.

In my former paper I gave for comparison a drawing of two seals on a bank-note of the Ming Dynasty, which is illustrated in Yule's *Travels of Marco Polo*. Mr. H. B. Morse has kindly sent me a reproduction of another bank-note of the Ming Dynasty, which was found in 1900 in the pedestal of a Buddha in the grounds of the Summer Palace outside Peking, and which is illustrated in his *Trade and Administration of China*, in which the seal characters on the note itself and of the seals on the note are much clearer than on that illustrated in Yule's *Travels of Marco*

Polo. It would be interesting if some Chinese scholar would examine the Tibetan seals I have mentioned, which appear to be an imitation of the Mongolian or Chinese seal character, to see whether they can be deciphered on that basis.



Larger seal of the Regent of Lhasa, on a permit granted to the Capuchin Monks at Lhasa in the year A. D. 1741.

A NEW GANGA RECORD AND THE DATE OF SAKA 380

By J. F. FLEET, I.C.S. (RETD.), PH.D., C.I.E.

MR. H. KRISHNA SASTRI has recently brought to notice a new and highly interesting record, of one of the early Ganga rulers of Mysore, which is incised on a set of three copper plates from Penukonḍa in the Anantapūr District, Madras.¹ I have the record in hand for editing in the *Epigraphia Indica*; and in my paper on it I shall discuss fully its nature, its date, and its bearing on certain other records of the same series. As, however, its date can only be fixed on the palaeographic evidence, which in this case entails a somewhat long setting out so that my paper cannot be published at any very early time, and as an account of the record is awaited with eagerness in certain quarters, I give here a brief notice of it, and also deal with another matter which is connected with it.

This new record from Penukonḍa is in Sanskrit, in prose throughout except for three of the usual imprecatory verses at the end of it, and in characters of an early type of the alphabet of Western India. It gives the short pedigree which is shown on p. 473 below. And its object is to recite that Mādhava II granted to a Brāhmaṇ, on a full-moon day of the month Chaitra (no era or regnal year is given), sixty-five plots of land, having a sowing capacity of twenty-seven *khaṇḍukas*, in the Karmatūva area at a place named Paruvi-mahātaṭāka, "Paruvi great

¹ See his Annual Report on Epigraphy for the year 1913-14, p. 11, No. 12, and p. 83, paras. 3, 4.

tank," in the Paruvi district (*vishaya*). The charter was written by Apāpa, son of the goldsmith Ārya.

In its characters, language, and orthography, this record stands all the usual tests; and its execution is good throughout. In all respects it contrasts very favourably with the other records of the same series, of which some are plainly spurious and others are to say the least doubtful. And my conclusions about it are that we have here at last a genuine early Gāṅga record, and that on the palaeographic evidence it is to be placed about A.D. 500, and somewhat before that year rather than after it: A.D. 475 seems a very good date for it.

As regards its bearing on the other records which have been referred to, I will here say only this. Those other records, including one which purports to come from the time of the same ruler Mādhava II, give a different statement of the pedigree. They omit the Āyyavarman of this record, and substitute two generations in the place of him: they name Harivarman as the son of Mādhava I, and Vishṇugōpa as the son of Harivarman; and they represent Mādhava II as the son of Vishṇugōpa, instead of Āyyavarman. It must be obvious that two such different statements cannot both be true: they might both be spurious and unreliable; but they cannot both be authentic. This new record, however, impresses itself upon us as a genuine one. And we therefore adopt its account of the pedigree, and find here still another reason, and one which ought to be enough in itself, for condemning such of the other records of this series as are not betrayed at once by their characters or other features.

Now, we have no date in the Saka era of A.D. 78, or in any other such reckoning, for any of these early Gāṅga

Early Gaṅga pedigree

Konkanivarman,
Dharma-mahādhira;
 of the Jāhnavēya (Gaṅga) family
 and the Kāpivāyana gōtra

—
Mādhava I,
Mahādhira

—
Āyyavarman,
 Gaṅga-rāja (no other title is given):
 anointed by the Pallava *Mahārāja* Siṃhavarman

—
Mādhava II,
alias Siṃhavarman,
Mahādhira;
 anointed by the Pallava *Mahārāja* Skandavarman

rulers, and no other means, beyond the palaeographic guide, of fixing the time of any of them.¹ That being so, we are interested in considering whether anything can be determined by means of the statements, found for the first time in this new record, that Āyyavarman was anointed by a Pallava king named Siṃhavarman, and his son Mādhava II by a Pallava king named Skandavarman.

I identify this Siṃhavarman with the Pallava king Siṃhavarman II of whom we have two records the characters of which match exactly those of our new record of Mādhava II;² and I assume that a Skandavarman

¹ I put aside, of course, the Śaka dates which are asserted in a few of the spurious Gaṅga records and in the imaginative chronicle entitled *Koṅgudēśarājakkal*: they are worthless, and do not even fit in with each other.

² Namely, (1) the Māṅgalūr grant, issued from Daianapura, *Ind. Ant.*, vol. 5, p. 155, and plates; and (2) the Pikira grant, issued from Menmātura, *Epi. Ind.*, vol. 8, p. 161, and plate.

came next or next but one in the succession after him, which is likely enough, as the name Skandavarman stands twice in the pedigree of Simhavarman II, in the cases of his grandfather and of that king's grandfather.

But here, again, in the matter of exact dates, we are met by the difficulty that we have no inscriptional date in the Śaka or any other era for any of the earlier Pallava rulers, and no other epigraphic means, beyond palaeography, of fixing the times of any kings of that family till about A.D. 645.

It is possible, however, that we may find what is wanted in the literary date which is to be considered now.

Not long ago Mr. R. Narasimhachar brought to notice a Digambara Jain work entitled *Lōkavibhāga*, written perhaps by *Simhaśūra* or perhaps by *Sarvanandin*¹ and treating of Jain cosmography, in connection with which there is put forward the date of Śaka 380, A.D. 458, for a Pallava king *Simhavarman*.²

The manuscripts of this work end with four verses which are plainly not a part of the work itself. The last of them only tells us that the work consists of 1536 verses in the *Anuṣṭubh* metre. The other three run thus:³—

Bhavyābhyah sura-mānush-ōru-sadasī śrī-Vardhamān-
ārhatā
yat-prōktaṁ jagatō vidhānam=akhilam jñātam Sudharm-
ādibhiḥ ।

¹ On this point see note 1 on p. 476 below.

² See his *Mysore Archaeological Report* of 1909, paras. 35, 112, and for details his *Report* of 1910, para. 115. Two manuscripts of the work have been found; one in *Nāgarī* at Bombay, and the other in Kanarese characters at *Mūdabidare* in South Kanara. The work is a Sanskrit one, based on *Prākṛit* writings, from one of which, the *Trilōkaprajñapti*, it quotes a few verses. I have it from Mr. Narasimhachar, in answer to a reference, that it is a Digambara work.

³ I give them from Mr. Narasimhachar's presentation of them in para. 115 of his *Report* of 1910.

āchāry-āvalik-āgataṁ vīracchītaṁ tat = Siṁhasūr-arshiṇā¹
 bhāṣhāyāḥ parivartanēna nipuṇaiḥ sanmānyatām²
 sādhubhīḥ || 1

Vaiśvê sthitê Ravi-sutê Vṛishabhê cha Jivê
 rājōttarêshu sīta-paksham = upētya chandrê |
 grāmê cha Pāṭalika-nāmaṇi Pāpa-rāshṭrê

śāstraṁ purā likhitavān = muni-Sarvanandī || 2
 Samvatsarê tu dvāvīṁśê Kūñch-īśaḥ³ Siṁhavarmanāḥ |
 aśīty-agrê Śak-ābdānām⁴ siddham = êtach = chhāta-trayê || 3

(Verse 1) "That whole laying out of the world which was told to worthy people by the holy Arhat Vardhamāna in the great assembly of gods and men, (*and*) which was learnt by Sudharman and others (*and*) came down through a succession of teachers, was translated⁵ by the sage Siṁhasūra:⁶ let it be highly approved by clever good men!"

(Verse 2) "The saint Sarvanandin formerly wrote out (*this*) scripture [i.e., made a copy of it] at the village named Pāṭalika in the Pāpa-rāshṭra country, when the Son of the Sun [Saturn] was standing in Vaiśva [the *nakshatra* Uttara-Ashādhā], when Jiva [Jupiter] was in Vṛishabha [the sign 'Taurus'], (*and*) when the Moon reached a bright fortnight in rājōttara (*stars*)."

¹ Read *Siṁhasūr-*, with *s* instead of *a*. Mr. Narasimhachar has taken this name as *Siṁhasūri*: but that would give here *Siṁhasūry-riṣhiṇī*, which violates the metre.

² Read *sanmānyatām*.

³ It seems that one manuscript has this reading, but the other has *Kūñch-īśa* = *Siṁha*⁴, of course without any difference in the meaning: at any rate, Mr. Narasimhachar has given the words in both ways. Either we must amend the text into *Kūñch-īśa-Siṁha*⁵, which perhaps does not satisfy the metre quite so well: or else we must use the genitive of the base *īś*, 'master, lord, ruler', instead of the more customary *īśa*.

⁴ It can hardly be doubted that this reading, of the Maḍalidare manuscript, is better than the *Śak-ābdānām*, "of those having the appellation Śaka," of the Bombay manuscript.

⁵ Lit. "was composed by turning round of language."

⁶ Regarding this name see note 1 above.

(Verse 3) "This was accomplished in the twenty-second year of Simhavarman, lord of Kāñchī, in three hundred, with eighty in front, of the Śaka years."

Following Mr. Narasimhachar's interpretation of these verses, we gather three things:—

First, the *Lōkavibhāga* was based on Prākṛit writings which were put into Sanskrit by a person named *Simhaśūra*.¹

Secondly, a copy of the Sanskrit work was made by a person named *Sarvanandin*, and was finished on a certain day in Śaka 380, in A.D. 458.

Thirdly, that day also fell in the twenty-second year of the reign of a lord of Kāñchī, that is, a Pallava king, named *Simhavarman*, who accordingly began to reign in A.D. 436-37 and was still reigning in A.D. 458.

Before committing ourselves to an acceptance of the date thus put forward for *Simhavarman*, king of Kāñchī, and then proceeding to decide which among various Pallava kings named *Simhavarman* may be identified with him, we should like to consider how far the record of the date may be taken as a reliable one.² In addition to the general point that such a literary date as this one has in no way the value which attaches to an inscriptional date, there are the following particular reasons for not accepting it very readily.

¹ I differ from Mr. Narasimhachar in taking the name of the first writer as *Simhaśūra*, instead of *Simhaśūri*: see note 1 on p. 475 above. But I follow his view that the work was composed in Sanskrit by that person, and that what *Sarvanandin* did was to write out a copy of it. I do so for the sake of not differing unnecessarily. But the text is equally well open, if not better, to being translated so as to tell us that *Simhaśūra* compiled the cosmography in Prākṛit, and that it was *Sarvanandin* who rendered it into Sanskrit. That, however, does not affect the vital point, which is that, whatever was done by *Sarvanandin*, it was done in Śaka 380 and in the twenty-second year of *Simhavarman*.

² Compare my remarks in this Journal, 1910, p. 820, note 1.

In the first place, the reference to Siṃhavarman king of Kāñchi (Conjeeveram) shows that the date must come from somewhere in the Pallava territory, which was about half-way down in Southern India. And, even apart from the fact that the earliest known instance of the use of the Śaka era anywhere near the Pallava territory only dates from Śaka 867, in A.D. 945, five centuries later than our given date,¹ it is strange to find the era not only used but also actually named as the "Śaka" era anywhere in Southern India at so early a time as A.D. 458.

The Śaka era had its origin, as an ordinary regnal reckoning, in Northern India, in Kāthiāwār and that neighbourhood; and it spread abroad and was invested with the name Śaka only when it was taken up by the astronomers as their second working reckoning for use particularly in their *Karaṇas* or practical handbooks, which was not very long before A.D. 500.² It is traced first, without any name attached to it, in the inscriptions of Nahapāna from Nāsik and in the inscriptions and on the coins of his successors, the so-called Western Kshatrapas or Satraps, from Kāthiāwār and those parts, which give dates in it ranging from the year 41 to the year 310, A.D. 119 to 388.

The earliest instance of its use under the name of the "Śaka" era is an astronomical one, dating from Śaka 427, with details falling in A.D. 505, which is cited by Varāhamihira of Ujjain in his *Pañchasiddhāntikā*, l. 8 (written about A.D. 550), and was taken over by him from the astronomer Lātāchārya, who seems to have been a native of Gujarāt.³ And the next literary mention of it, again an astronomical one, is found either in the

¹ This instance is from an Eastern Chalukya record, Kielhorn's List of the Inscriptions of Southern India, *Epi. Ind.*, vol. 7, appendix, No. 563.

² For previous remarks on the early and later history of the Śaka era, see this Journal, 1910, p. 818; 1913, p. 987.

³ Varāhamihira also mentions it by name, without dates in it, in his *Bṛihat-Saṃhitā*, 8, 20, 21; 13, 3.

statement of Brahmagupta of Bhīnmāl in Rājputānā, that he wrote his *Brahma-Siddhānta* in Śaka 550, A.D. 628,¹ or in the work of Lalla (written about the same time), who laid down Śaka 420, A.D. 499, as an epoch for making certain corrections in some bases for calculations.²

The earliest inscriptional use of it, with the name attached to it, in any part of India, is found in a record of the Chalukya king Kirtivarman I at Bādāmi in the Bijāpūr District, Bombay, which is dated in Śaka 500, in A.D. 578.³ During the next century we find it in only eleven inscriptional dates, ranging from Śaka 526, A.D. 604, to Śaka 598, A.D. 676, of which three (of A.D. 611, 612, and 634) are Chalukya dates from Western India and the others come from Cambodia, to which foreign country the reckoning must have been carried in the course of the early trade from Broach via Tagara (Tēr) to a port in the Kistna District, Madras, and so across the sea.⁴

After that time the use of the era increased and spread in Southern India, particularly in the western parts, and eventually found its way into the North. But we are not concerned here with its later history.

From before A.D. 578 we have a sufficient number of undated inscriptional records, from all parts, to convince us that the reckoning was hardly if at all known in Southern India before about A.D. 550, when the Chalukyas rose to power and adopted the use of it, most likely

¹ Ed. Sudhakara Dvivedi, Benares (1902), p. 407, verses 7, 8.

² Ed. Sudhakara Dvivedi, Benares (1886), p. 10, verse 59; p. 50, verse 18.

³ Kielhorn's *Southern List*, as above, No. 3. I set aside, of course, various Śaka dates, ranging from A.D. 248 to 495, which are put forward in spurious records, some of the Gāṅga series and others from other sources; no value attaches to them.

⁴ For these eleven dates see Kielhorn's *List of the Dates of the Śaka Era in Inscriptions in Ind. Ant.*, vol. 24, p. 181, Nos. 14 and 16 to 15. Nos. 1 to 12 and 15 are rightly marked by him as spurious, and come from long after the time with which we are concerned; No. 13 is the Bādāmi date of Śaka 500, A.D. 578, mentioned just above.

as a result of getting official astrologers from the direction of Gujarāt and its neighbourhood. And it seems worth while to note that Professor Kielhorn's list of the Pallava records in *Epi. Ind.*, vol. 7, appendix, Nos. 616 to 658, does not show any record, capable of being taken in any way as a Pallava record, which presents a Śaka date; nor has any such record been found since the date of that list: also, that Professor Hultsch, who has a wide acquaintance with South-Indian literature, told me in 1909 that, apart from the case that we are considering and three well-known ones of A.D. 783, 837, and 897,¹ he did not know of any South-Indian literary works, other than comparatively modern ones, which are dated in the Śaka era. It may also be noted that in the records of another great southern dynasty, that of the Chōlas, the earliest traceable one presenting a Śaka date is the Kaliyūr inscription of Apramēya, a general and minister of Rājārjadēva I, which is dated in Śaka 928, with details falling in A.D. 1006.² Like the earlier Eastern Chalukyas, the Pallavas and the earlier Chōlas and their officials and subjects seem to have favoured the system of regnal reckonings to the entire exclusion of any era.

In these circumstances, we could hardly fail to view somewhat doubtfully a literary date which purports to be of Śaka 380, A.D. 458. But further, this date does not actually come from A.D. 458. This is made clear by the statement that Sarvanandin wrote his copy of the *Lōkavibhāga* in that year, indeed, but "formerly (*purā*)."³

¹ These are:—(1) The Jain *Harivamśa*, Śaka 705; *Ind. Ant.*, vol. 15, p. 141, and Peterson's Fourth Report on Sanskrit MSS., extracts, p. 176; (2) the *Jayadhavalatīkā*, Śaka 759; *JBRAS*, vol. 18, p. 226; and (3) the *Uttara-Purāṇa*, Śaka 820 (current); *Ind. Ant.*, vol. 12, p. 217, and Bhandarkar's Report on Sanskrit MSS. for 1883-84, pp. 429, 430.

² Kielhorn's Southern List, as above, No. 715. This, moreover, is from Mysore; as also are twelve out of the next fourteen such instances, ranging from A.D. 1012 (No. 717) to A.D. 1114 (Nos. 783, 786).

³ Mr. Narasimhachar has not failed to notice this word *purā*, but has sought to explain it away as meaning "incessantly", with the sense,

This is plainly a statement which was put on record at a very appreciable time after that of Sarvanandin himself; and it is not at all calculated to help us to accept the date confidently.

On the other hand, however, in favour of the date it is to be noted that we have no signs of any famous king *Siṃhavarman*, *Pallava* or other, who might be cited (as, for instance, *Chandragupta* or *Aśoka* might be cited), with perhaps a traditional date for him, by anyone wishing to set up a particular antiquity for a favourite work. The introduction of such a name can hardly be accounted for, except on the understanding that there is something substantial at the bottom of the date. And the date can be understood if we assume that the line of teachers to which *Siṃhaśūra*, *Sarvanandin*, and the composer of the verses belonged, had preserved a *Paṭṭāvali* or other record which included royal as well as priestly names and details, and from which someone using it about (say) Śaka 680, A.D. 758, — (but it might well be very much later still), — was able to connect *Sarvanandin* with the twenty-second year of a *Pallava* king *Siṃhavarman*, and, by adding up details of the lengths of reigns, to put together, with more or less accuracy, a total of 300 years which took him back to what he would naturally call "Śaka 380" for *Siṃhavarman* and *Sarvanandin*.

This date, in fact, is much on a par with many dates in the *Vikrama* era of B.C. 58 which we have from the northern Jain literature and records; as, for instance, in a *Paṭṭāvali* of apparently the *Vaṭa Gachchha* which states various dates as being of the years 350, 385, 412, and so it must be supposed, that *Sarvanandin* wrote his copy of the work straight away at one sitting, or at any rate without laying it aside in favour of any other duties. It is difficult to think that anyone will be found to endorse such a rendering, which seems to be really based on some confusion with *pūra*, *pūram*, 'filling, making full', whence we have in *Marāṭhī* *pura*, 'complete, entire; fully, thoroughly': the word *pura* is too well established as meaning in Sanskrit narrative 'before, formerly, of old'.

on, "after Vikrama",¹ and tells us, for instance, that: "The Śātrunṛjaya-Māhātmya was composed by Dhanēśvarasūri at Valabhi, at the earnest request of Śilāditya (in the year) 477 after Vikrama," i.e., in A.D. 420.² We have no desire to dispute these dates themselves, so far as the years are concerned: at least, not all of them, though we cannot accept the statement about the Śātrunṛjaya-Māhātmya, if only because there was no king Śilāditya of Valabhi before at any rate A.D. 590. But, as it is clear that the term Vikrama was not connected with the era of B.C. 58 before about A.D. 800,³ we are sure that it was not included in any original entries on which the dates may have been based. In the same way, it is practically certain —(though in this case we run more closely to the limits)—that this date of Śaka 380 is at least not based on any original record which included the term Śaka.

Such are the points for and against the acceptance of the date of Śaka 380, A.D. 458, put forward in connection with the Lōkavibhāga for a Pallava king Sinhavarman. We should like, of course, to learn something more about Sinhāsūra, Sarvanandin, the Lōkavibhāga itself, and the Prākṛit Trilōkaprajñapti which is quoted in it, before coming to any final conclusion: and, as all the indications are that the record of the date must come from the

¹ See Bhandarkar's Report on Sanskrit MSS. for the year 1883-84, p. 322.

² Loc. cit., line 17. The words are:—Vikramāt 477 Valabhyām Śilāditya-uparōdhena Śātrunṛjaya-māhātmyam Dhanēśvarasūriṇā kṛitam. The term *uparōdha* is rather puzzling: but it seems to be indicated as meaning an importunate or forceful form of *abhyarthana*, 'asking, requesting', by the parallel passage in the prose version of Dhanēśvara's book, made in 1781 by Hamsaratna and called Śātrunṛjayamāhātmya-ollēkha, where we have:—Śrī-Śātrunṛjay-oddhara-kāraka-Surāshṭra-dēśādhipati-Śrī-Śilāditya-nṛipasya = ābhyarthanayā Dhanēśvarasūribhis Śrī-Śātrunṛjaya-māhātmyam kṛitam. I am indebted to Dr. Barnett for this extract from Weber's Berlin Catalogue, vol. 2, part 3, p. 1072.

³ See Kielhorn in *Ind. Ant.*, vol. 20, p. 405.

western parts of the Pallava dominions, perhaps further inquiries in the east of Mysore and that neighbourhood may produce some useful result.

Meanwhile, as I have no wish to reject unnecessarily anything that can by any means be made useful in settling the early history, and as I find that a Pallava king *Siṃhavarman*, known from inscriptional sources, — namely, *Siṃhavarman II* of the *Māṅgalūr* and *Pikira* records (see p. 473 above), — is really to be placed not long before A.D. 500, I am disposed to think, subject to such reservations as naturally present themselves, that we may go so far as to accept this date of Śaka 380, A.D. 458, with the effect of putting the beginning of his reign in A.D. 436 or 437, as approximately a good one for him, and as giving a fairly sound starting-point for fixing the early Pallava chronology and other matters connected with it.

On this basis, events may be fixed provisionally as follows:—

<i>Siṃhavarman II</i> began to reign . . .	A.D. 436
" anointed <i>Āyyavarman</i> . . .	450
" was still reigning . . .	458
<i>Skandavarman III</i> began to reign . . .	460
" anointed <i>Mādhava II</i> . . .	470
<i>Mādhava II</i> made the grant recorded on the <i>Penukoṇḍa</i> plates . . .	475

It remains to notice the astrological details in this literary date. They seem to give it a great air of reality and originality; especially because they work out correctly. As a matter of fact, however, they increase the doubts which surround it, because they have a decidedly later ring about them: in A.D. 458 the Hindūs were still doing not very much more than feeling their way in the matter of the general planetary astrology; and the earliest known inscriptional dates which go

beyond the position of the moon are two of A.D. 667 from Cambodia, which name the zodiacal signs for all the five planets properly so-called.¹

The given year is Śaka 380 (expired), beginning in March A.D. 458. The details are: Saturn being in Vaiśva, that is, in the *nakshatra* Uttara-Ashādhā, the regents of which are the Viśvédévas; Jupiter being in the sign Vṛishabha (Taurus); and the moon having come to a bright fortnight, that is, having just passed a moment of new-moon and come to the beginning of the first *tithi* or śukla 1 of a new month, in *rājōttara* stars. The month is not named: it has to be found from what is said about the place of the moon. As to that, the term *rājōttara* means any one of the three *nakshatras* the names of which have the prefix *uttara*, namely, Uttara-Phalgunī, Uttara-Ashādhā, and Uttara-Bhadrapadā, which, along with Pushya, belong specially to kings in the apportionment of the *nakshatras* among the various classes of people.²

The date was calculated for Mr. Narasimhachar by Professor Sasipala Jha, of Benares, who found it to be correct for the beginning of Chaitra śukla 1, Śaka 380 expired, that is, for 1 March, A.D. 458. Working by the Present Sūrya-Siddhānta and apparently for mean places,³ he found that "on that day before midnight"

¹ See Kielhorn's List of the Śaka Dates in Inscriptions, *Ind. Ant.*, vol. 24, p. 183, Nos. 23, 24; and for the full details see Barth's *Inscriptions du Cambodge*, pp. 68, 74. The first of them gives the sign (but not the *nakshatra*) for the moon also: the second gives her *nakshatra* (and not the sign). An earlier record, of A.D. 622, also from Cambodia (No. 19 in the same List), gives both the *nakshatra* and the sign for the moon, but does not mention the planets.

² See *Bṛhat-Saṃhitā*, 15, 28.

³ There are various indications that the mean places are the right ones to take for the planets for even a long time after the date with which we are concerned. And Professor Jacobi, examining the published result in 1910, told me that on the day mentioned above, by their true longitudes, Saturn was in Śravana, having left Uttara-Ashādhā fifty-two days earlier, and Jupiter was in Aśvini, not coming to Bharanī until twenty-eight days later. It thus seems clear that Professor Jha worked for the mean longitudes; and quite rightly.

[so as quoted : but it is more likely that he said "at the midnight before the beginning of that day"] Saturn was in Uttara-Ashādhā, Jupiter was in Bharanī, and the moon was in Uttara-Bhadrapadā.

Those results are, of course, quite right as far as they go : and it does not affect the merits of the case that they would have been worked out better according to some earlier authority. Nevertheless, we cannot accept that day as the intended date ; because the statement as to the position of Jupiter has not been treated properly. To suit his results, Professor Jha has taken the word *Vṛishabhē* as *Vṛisha-bhē*, "in the *nakshatra* of *Vṛisha*." He has identified *Vṛisha* through *Dharma* with *Yama*, who is the regent of the *nakshatra* *Bharanī*. And he has applied the record as placing Jupiter in *Bharanī*.

Now, there is, of course, no particular reason why a *nakshatra* should not be cited for Jupiter, just as much as for Saturn.¹ But, to say nothing of the difficulty of really identifying *Vṛisha* with *Yama*,² and of the point that, if *Bharanī* had been intended, the composer of the verse would naturally have said *Yama-bhē*, "in the *nakshatra* of *Yama*," suiting the metre just as exactly, so marked a word as *Vṛishabhē* can only mean "in the sign *Vṛishabha*." And *Bharanī* is a part of *Mēsha*, the Ram, next before *Vṛishabha*, the Bull ; and so Jupiter's position in *Bharanī* does not place him in *Vṛishabha*. Accordingly, the result for Jupiter bars us from accepting the date arrived at by Professor Jha.

The year is A.D. 458. In this year Jupiter came to

¹ In both cases, however, it would be exceptional. The inscriptional records show that it was almost always the custom to cite the signs for the planets, just as is done now in the columns for remarks and in the horoscopic tables which are given in Hindū almanacs.

² The idea in doing so seems to have been that *Vṛisha* is Justice or Virtue (*Dharma*) personified as a Bull or as Śiva's Bull, and that *Yama* also is a personification of *Dharma*. But there is no indication that *Vṛisha* is found as a name of *Yama*. However, that is beside the question.

Vṛishabha, by mean motion,¹ according to the First Ārya-Siddhānta (written in A.D. 499 or soon after) on 15 June, and according to the Original Sūrya-Siddhānta (coming from much about the same time) on 29 June. We must therefore look for a day after at any rate 14 June in this year. And I find the day to be 25 August, on which day the new-moon of Bhādrapada occurred, and the *tithi* Āśvina śukla 1 began, at closely about 43 minutes after mean sunrise (for Ujjain). The moon was in Uttara-Phalgunī at that moment and for 12 hrs. 52 min. afterwards. Jupiter was then in Vṛishabha (see above), where he remained till 11 June (by the F.A.S.) or 25 June (by the O.S.S.) in the next year. And by both the works which I have mentioned Saturn, by mean motion, was still in Uttara-Ashādhā: he came to this *nakshatra* on 26 January, A.D. 458, and was not due to leave it till 1 March, A.D. 459.

Thus, the real day is 25 August, A.D. 458: for this day the given details for Saturn, Jupiter, and the moon, are all quite right. But it does not by any means follow that the record used by the composer of the verses quoted on p. 474 above contained these details, any more than the number of the year and the name of the era. Such items could be worked out and filled in in early times just as readily, though perhaps not as quickly, as we can calculate them now. And the whole of verses 2 and 3 may easily have been built up on the basis of some such simple record as that Sarvanandin finished making a copy of the Lōkavibhāga, or finished composing that work in Sanskrit (see note 1 on p. 476 above), on Āśvina śukla 1 in the twenty-second year of the reign of Simhavarman king of Kāñchī: all that had to be done was to fix a Śaka year in the way indicated on p. 480 above, and then work out the places of the moon and the two planets for that day.

¹ Compare note 3 on p. 483 above.

MISCELLANEOUS COMMUNICATIONS

A PECULIARITY OF THE KHOTANESE SCRIPT

With regard to our knowledge of the Khotanese language, Professor Sten Konow's article on "Khotan Studies" in this Journal for 1914, pp. 339 ff., is one of the most important contributions. It settles the date of that language, just as Professor Sylvain Lévi's equally important article in the *Journal Asiatique* (ser. XI, vol. II, pp. 311 ff.) had settled the date of the Kuchean language. But Professor Konow's article draws incidentally our attention also to a minor point concerning a peculiarity in the Khotanese script, which is of considerable interest (loc. cit., pp. 341 and 351, footnote), namely, that in certain Khotanese dated documents the word *rruṃdā*, "of the king," appears "miswritten" as *rrāṃdā*.

The Khotanese language, as is well known, employs an early form of the Indian script. That script uses four distinct radical signs (*mātrikā*) to express the four vowel sounds *a*, *i*, *u*, *e*. Originally the Khotanese script used the same signs, but gradually it came to discard the special signs for *i*, *u*, *e* in favour of the single radical sign for *a*. Thenceforth it distinguished the vowels *i*, *u*, *e* from the vowel *a* by adding to the radical *a* the vowel marks by which it distinguished, e.g., the syllables *kī*, *kū*, *ke* from the syllable *ka*. The originally vocalic radical *a*, in fact, now came to function as a kind of consonantal radical, just as any other consonantal radical (*k*, *g*, *c*, etc.); the vowel *a* was supposed to be "inherent" in it, and the vowels *i*, *u*, *e* were indicated by adding to it diacritical marks. Let us transcribe this quasi-consonantal radical by *x*, the Khotanese then wrote अ *xa*, ञि *xi*, ञु *xu*, ञे *xe*, just as they wrote, e.g., क *ka*, कि *ki*, कु *ku*, के *ke*.

The growth of the practice of the Khotanese to treat the originally purely vocalic radical 𑖀 as a *quasi*-consonantal radical can be abundantly illustrated from the manuscripts and manuscript-fragments recovered from Eastern Turkestan. To give a detailed list of illustrations would much exceed the limits of a short note. It will be found in the introduction to my forthcoming double volume of *Manuscript Fragments from Eastern Turkestan*. But one illustration I may notice here because it bears on the remark in Professor Konow's article above referred to. Among the Rolls of the Stein Collection there are two, Ch. lviii, 007 and Ch. 0046 (shown in this Journal for 1911, Pls. I, IV, pp. 452, 458), which give syllabary tables, as current in Khotan, in full detail, including the complete series of ten vowels (*a, i, u, e, o* long and short). In them the whole series, including short *ä*, but excluding long *ā*, is written with the *quasi*-consonantal radical 𑖀. But what in the present connexion I wish particularly to draw attention to is the circumstance that the diacritical mark indicating the sound of short *ä* is not attached to the foot of the radical 𑖀 in the form of a wedge, or a curve, or an angle, as it is usual with other consonantal radicals, but is mounted on the top of the radical 𑖀 in the form of a curve, as in Pl. I, l. 1, or of an angle, as in Pl. IV, l. 17. The result is that in these syllabaries the graphic sign for short *ä* is practically indistinguishable from that for long *ā*. The existence of the practice of such writing in Khotanese is confirmed by the observation noted by Professor Konow that the word *rrumḍā* seems sometimes to be miswritten *rrāḍā*. That observation shows that the optional practice of removing the *ä*-sign from the foot to the head of the radical prevailed not only in the case of the radical 𑖀, but also in the case of other consonantal radicals (such as *rr* in the present case); and that the apparent spelling *rrāḍā* is not a "miswriting", but only an optional variety of spelling *rrumḍā*.

The recognition of this Khotanese optional spelling (which approximates, or even identifies, the spelling of short *ā* with that of long *ā*) now explains also other particulars in the Khotanese syllabary rolls, such as the omission of all *ā*-syllables in Roll Ch. 0046 (loc. cit., p. 459, Pl. IV). For example, l. 2 of that roll professes to give the syllabic combinations of all ten vowels with the consonantal radical *y*; but the syllable *yā* is omitted, evidently, as we now can see, on the ground that it was written practically identical with *yā*, which syllabic combination is given. No doubt for the same reason all *e*-syllables are omitted, because in writing they practically coincided with the *i*-syllables. Again, it explains the restriction of the vocalic radicals in Roll xl, 002, to the three items *a*, *ā*, *ū* (loc. cit., p. 457, and pl. ii, l. 42). The meaning of this restriction is to indicate that (1) all vowels are to be written with the single radical 𑖦, except long *ā*; (2) that the latter is to be written with the special radical 𑖧; and (3) that long *ā* and short *ā* are to be written identically with the radical 𑖦 marked at its head by a high-pitched curve (𑖦^h).

Moreover, that recognition helps us to understand another important point in the documents with which Professor Konow's article deals. The name of the Khotanese king, mentioned in them, is not *Viśa Vāham*, but *Viśa Vuham*. And this correct reading is supported by the Tibetan *Vijaya Bohan*, or rather *Bidzaya Bohan*. The actual reading of the Tibetan text, as Dr. Thomas, who has kindly verified it, informs me, is བི་འ་ཇ་ཡ་བོ་ཀ་ཅན་པོ་ *vi . dza . ya . bo . han . chen . po*. The Tibetan *bohan* cannot possibly be equated with Sanskrit *vāhana* or Khotanese *vāham*. That equation was started by Baboo S. C. Dās (JASB., lv, 199, where, however, he spells *vāhana*) and is accepted, apparently from him, by Professor Konow. But so far as I can discover, it has no

support whatsoever in the usages of the Tibetan language. I have worked through the whole of Baboo S. C. Dās's *Tibetan-English Dictionary* without discovering in it a single example of a Sanskrit *ā*-syllable being rendered in Tibetan by an *o*-syllable. On the contrary, in Tibetan "tatsama" words Sanskrit *ā* is not changed, and in "tadbhavas" it becomes *ā*. I may quote a few typical examples. Thus "tatsamas" are—

Sanskrit *kārikā* = Tibetan *kā . ri . kā*, p. 15a.

„ *nāga* = „ *nā . ga*, p. 729a.

„ *vihāra* = „ *bi . hā . ra*, p. 869b.

„ *śākya* = „ *śā . kya*, p. 1229a.

"Tadbhava" examples are much more common, such as—

Sanskrit *kāka*, crow = Tibetan *ka . ka*, p. 2b.

„ *kārṣāṇa*, a coin = Tibetan *kar . śa . pa . ni*,
p. 14a.

„ *nārikela*, plantain = Tibetan *na . ri . ki . la*,
p. 728a.

„ *cāṇakya*, a pr.n. = Tibetan *tsa . na . ka*,
p. 995a.

„ *jāti*, nutmeg = Tibetan *dza . ti*, p. 1047a.

„ *rasāyana*, a medicament = Tibetan *ra . sa . ya . na*,
p. 1161b.

„ *śālī*, wild rice = Tibetan *sa . lu*, p. 1263b.

„ *ācārya*, a title = Tibetan *a . tsa . ra*,
p. 1345a, etc.

This shows clearly enough the treatment that was accorded by Tibetan speech to a foreign word containing a long *ā*. It follows that in that speech Sanskrit *vāhana* could not turn into *bohan*: as a "tatsama" it might be *bāhan*; as a "tadbhava" it would be *bahan*. Regarding the relation of Khotanese *u* to Tibetan *o*, we may compare the Tibetan *so . pa . ra*, areca-nut, p. 1282a, which renders the Indian vernacular *supāri*. The latter is also pronounced *sōpari*, with short *ō* (see Sir G. Grierson's *Bihar Peasant Life*, § 1056, p. 249); and very possibly

the Tibetan name *bohan*, which is not a native Tibetan word, was pronounced with a short *ö*, which is not very different from *u*. Another example is the Tibetan *o . di . yan*, p. 1352a, which renders the Sanskrit proper name *udyāna*, and also illustrates the treatment of the final syllable *yāna* = *yan*, as *hana* = *han* in *bohan*.

The question may now be asked with what Sanskrit word the Khotanese *vuhan* is to be equated. After all it does not seem impossible that it may be really a native Khotanese word; and the fact that it alone in the whole Tibetan list of names of the Vijaya dynasty (between thirty and forty) has an un-Sanskrit sound rather makes for that view. Still, it is quite possible that it is a Sanskrit word, but so excessively transformed that its Sanskrit equivalent was not recognizable to the Tibetan annalist, who therefore contented himself with simply transferring it to his list with the Tibetan spelling *bohan*. On that assumption I would suggest that it renders the Sanskrit word *vyāhana*, and that the full Tibetan name *bohan chenpo* renders the Sanskrit *mahā-vyāhana*, in the same way as, e.g., the Sanskrit *mahākauṣṭhila* (pr.n. of a disciple of Buddha) is rendered in Tibetan by *ko . śa . thi . la . chen . po*, p. 36a. The circumstance that the royal name occurs alternatively with and without *mahā*, as *vuhan* in the Khotanese documents and as *mahā-bohan* (*bohan chenpo*) in the Tibetan Annals, need not cause any difficulty. Such alternatives are not unexampled; witness *Kāśyapa* and *Mahākāśyapa*, *Kātyāyana* and *Mahākātyāyana*, *Maudgalāyana* and *Mahāmaudgalāyana*, etc. (see Index to *Divyāvadāna*). Anyhow, that difficulty remains whatever Sanskrit equation be preferred for *bohan* = *vuhan*. Neither is the use of the term *vyāhana* as an element in the formation of a name without precedent. In the *Lalitā-vistara*, e.g., *mahāvvyāha* occurs as one of the epithets of the "dharmacakra-pravartin" Buddha (Lefmann ed., p. 423, l. 15) as well as the name of

a devaputra (p. 277, l. 14); similarly, *Lalita-vyūha*, as the name of a bodhisattva (p. 290, l. 10), etc. A royal name *Vijaya-vyākṣana*, or *Vijaya Mahāvākṣana*, therefore, is quite imaginable. However, the main point that I wish to make is that the reading *Viśa Vuhan* of the king's name in the Khotanese documents strikingly confirms Professor Konow's discovery of the identity of that king with the king *Vijaya Bohan chenpo* of the Tibetan Annals.

Perhaps it may, in this connexion, be well to explain that the practice, in the Nāgarī script, of writing ओ *o* and औ *au*, with the radical अ *a*, is of an entirely different nature. The practice is quite modern, dating no further back than the early eighteenth century. It arose from the gradual blending of the characters for the vowels *a* and *au* from the tenth century onwards, as may be seen by referring to Table v of Bühler's *Indian Palæography*, and comparing Nos. ix, xii, xvii in traverses 1 and 9. The Nāgarī practice does not extend to the *i* and *e* vowels, which had no tendency to blend, and therefore retained their ancient special vocalic radicals.

The essence of the Khotanese practice of writing is to make the originally vocalic radical अ to function as a consonantal radical; and this fashion is reminiscent of the Semitic alphabet, with its consonantal 'alef and 'ayin radicals. Modern archaeological discoveries have shown abundantly that Semitic influences were at work very early in Eastern Turkestan. The consonantal use of a vocalic radical is quite foreign to the Indo-Aryan language and script. It is for this reason, among others, that the idea of an importation of the Tibetan script from India is quite inadmissible. The Tibetan script agrees with the Khotanese script in making the vocalic radical अ to function as a consonantal radical, and this fact shows quite clearly that the Tibetan script was introduced from Khotan. Dr. A. H. Francke, therefore, is quite right

in correcting (*Epigraphia Indica*, vol. xi, pp. 266 ff.) the usually held view of the Tibetan tradition on the subject of the introduction of the Tibetan alphabet. Sron-tsan Gampo extended Tibetan dominion as far as Khotan. He thus came to know of the existence of the art of writing in that country. Accordingly he dispatched a delegation under Thon-mi Sambhoṭa to procure that art from Khotan. Thon-mi, travelling by way of Kashmir, had the good luck to meet in that country a learned Brāhman from Khotan, called Li-byin or "Blessing of Khotan" (*li* being the well-known Tibetan name for Khotan). That Brāhman taught him the Khotanese alphabet; and Thon-mi, on the basis of that alphabet, worked out an enlarged alphabet to suit the requirements of the Tibetan language. The Tibetan alphabet can be called Indian only in the sense that its direct source, the Khotanese alphabet, is ultimately an Indian alphabet.

By the way, the curious fact that the Tibetan alphabet makes the *a*-radical to close its series of consonantal radicals (*gsal byed*) is instructive from the point of view above explained. In the Indian alphabetic system, as is well known, the vocalic radicals for *a*, *i*, *u*, *e* occupy a place in advance of, and separate from the consonantal radicals.

A. F. RUDOLF HOERNLE.

APASTAMBA AND THE *BAHVRCA BRAHMANA*

In the preface (p. xxvii) to the third volume of his edition of the *Āpastamba Śrauta Sūtra*, Professor Garbe writes: "The extent to which the Brāhmaṇas of the Rgveda have influenced the composition of the *Āpastamba Śrauta Sūtra* does not seem to reach beyond those passages where the *Bahvrcabrāhmaṇa* is directly quoted. In one of these passages at least, viz. *Āp. Śr. xii, 17. 2*, it is

apparent that our author has not quoted the *Aitareya*, but the *Kauṣītaki Brāhmaṇa* (xii, 5)."

This statement suggested to me an examination in greater detail of the citation of the *Bahvrca Brāhmaṇa* with a somewhat surprising result. The passage cited by Garbe is not a very correct quotation from the *Kauṣītaki*, which has *yady u svayam hotā syād anāttisthed aupagātram hy asya bhavati*, as against *yady u vai svayam hotā yajamānaḥ syāt surped evaupagātram hy asya*. The addition of *yajamānaḥ* is negligible, but *anāttisthed* is different, and suggests the use of a source other than that assumed by Garbe. The *Aitareya* (ii, 22) differs entirely.

This conclusion is rendered more and more probable by an examination of the other passages concerned. According to Garbe's *Index*, the *Bahvrca Brāhmaṇa* is cited in nine places, the *Bahvrca*s in three, and the *Kauṣītaki*s in one. The last passage is x, 1. 10, which attributes to the *Kauṣītaki*s the use of a seventeenth priest, the *Sadasya*; there is a reference to a *Sadasya* in the *Kauṣītaki Brāhmaṇa* (xxvi, 5), and the name is clearly known to the *Śāṅkhāyana Śrauta Sūtra*,¹ and his function there of pointing out a blunder is consistent with the character assigned to him by the notice in *Āpastamba* (x, 1. 11) as overseer, but clearly *Āpastamba* had more to go on than this mere incidental and isolated remark when thus he can, as he does, treat him as a normal functionary additional to the other priests.

Of the references to the *Brāhmaṇa*, the first (i, 21. 10) is an erroneous quotation; the real passage is i, 20. 10, which has no parallel in either of the *Brāhmaṇa*s of the *R̥gveda*. The second (v, 15. 1) uses the rare expression *kamaṇḍalupada*, explained in the commentary as referring to an animal; it is not found in either the *Aitareya* or the *Kauṣītaki Brāhmaṇa*. The third is (vi, 13. 9) *sarve*

¹ See the mantra in v, 1. 8, with *Ānartīya*'s commentary. Cf. *ĀGS.* i, 23. 5; *SB.* x, 4. 1. 19; Weber, *Ind. Stud.* x, 144.

vā ete homārthā ādhīyante; catasro gārhapatyē juhōti catasro 'nvāhāryapacane dve āhavanīye daśa saṃpadyante daśākṣarā virūḍ virājā yajñāḥ saṃmītaḥ; this is not found exactly in any part of the *Kauṣītaki*, but it does occur in part in ii, 3, which has *homāya hy etā ādhīyante; catasro . . . āhavanīye tā daśa saṃpadyante daśadaśinī virūḍ śrīr virūḍ annādyam*, etc. Here, again, the resemblance is partial and restricted. The fourth passage is vi, 15. 16, regarding the Agnihotra; it has no parallel in the *Kauṣītaki*, and the same remark applies to the fifth passage, vi, 31. 13, regarding the Āgrayāṇa, which gives a system of that sacrifice according to which rice and barley should be used each in its own season, or rice only as being the more easy to handle. The passage is of special interest, as it clearly contradicts the view of the *Kauṣītaki* itself (iv, 12-14), while vi, 31. 1 has in *śyāmākān uddhartavai* a certain similarity to the *Kauṣītaki*, iv, 12. This points clearly to the use of a text of some similarity to, but also some difference from, the *Kauṣītaki*.

The sixth passage (viii, 5. 2: *prarūdhakakṣe yaṣṭavyam* of the four-monthly offerings) is in neither Brāhmaṇa. But the seventh (xi, 2. 10), which has *yo 'nucānaḥ śrotriyaḥ tasya pravṛṇjyāt*, has a parallel in the *Kauṣītaki* (viii, 3), where, however, *syāt* is added after *śrotriyaḥ*. This is the nearest approach to an exact quotation. The eighth passage is xii, 17. 2, noted by Garbe and already dealt with; and the ninth (xviii, 8. 7, on the Rājasūya) is not only marked by an impossible piece of grammar (*ṣaṣṭi trīṇi śatāni*, with variants for the normal *trīṇi ṣaṣṭi-śatāni*, which the scribes may have not understood) but is not in agreement with either Brāhmaṇa of the *Rgveda*.

The references to Bahvūcas merely yield a similar result: one is general (viii, 15. 12), referring to the fact that the Bahvūcas do not practise a ritual form adopted in Āpastamba; one (xiii, 24. 10), which asserts the substitution

of an *āmikṣā* for Mitra and Varuṇa in place of the *anūbandhyā*, is in accord neither with the *Kauṣītaki* (xviii, 12) nor the *Āśvalāyana Śrauta Sūtra* (vi, 14, 19), which allow as an alternative only a *payasyā*. The other (vi, 27, 2) gives a couple of mantras for the Agnyupasthāna of one about to go on a journey and one who has returned as *namo vo 'stu pravatsyāmi* and *namo vo 'stu prāvātsyam*. The last mantra is nonsense; *prāvātsam* is obviously meant and should be restored. But the verses are not known to either Brāhmaṇa or any Rgvedic text.

There can be little doubt as to the conclusions to be arrived at from these premises; there are altogether twelve passages¹ which we should find in some form or other in the Brāhmaṇas of the *Rgveda*; not a single one of these occurs in the *Āitareya*, which Āpastamba must be held not to have used. In the case of the *Kauṣītaki* we have proof that Āpastamba knew of a practice of the *Kauṣītakins* which is implied in one passage of the *Kauṣītaki Brāhmaṇa* and provided for in the *Sūtra*. Further, in one passage Āpastamba uses a phrase which is nearly verbally a quotation from the *Kauṣītaki*, and in two places he cites views akin in matter to the *Kauṣītaki*, but diverging seriously in form. But in the remaining eight passages the *Kauṣītaki* has nothing to approach the texts cited in Āpastamba, though it deals with the topics in question.

It would, therefore, be illegitimate to assign to Āpastamba any quotation of the *Kauṣītaki Brāhmaṇa*; in nine passages in which he quotes a *Bahvrca Brāhmaṇa* he differs entirely in six, materially in two, and slightly in one. It is perfectly certain that he meant some definite work which he may have had before him, and in all probability all his quotations come from it.

¹ Omitting viii, 15, 12, which refers merely to what is not done by the *Bahvrças*.

This conclusion is important, for we have no definite knowledge of another *Rgveda* Brāhmaṇa than those already edited beyond the suggestions contained in the rare *Mahaitareya* and *Mahākauṣītaki* preserved in the Sūtras of the *Rgveda*.¹ That either of these texts is meant is at least improbable; the usual view is that both texts were merely our existing Brāhmaṇas with additions: for instance, we do know that the first two books of the *Śāṅkhāyana Āraṇyaka*² were sometimes reckoned as parts of the *Kauṣītaki Brāhmaṇa*, and that the fourteenth and fifteenth books of the *Śāṅkhāyana Śrauta Sūtra* were also so reckoned.³ That Sūtra therefore and its commentator knew a larger Brāhmaṇa than we have. If this view is correct, then the Brāhmaṇa of Āpastamba was not the *Mahākauṣītaki*, for the passages he cites are different from the rules of the Brāhmaṇa as we have it. We know even less of the *Mahaitareya*, and as the *Āitareya* is almost restricted to the Soma sacrifice and the Rājasūya it is possible that the *Mahaitareya* was a text with addenda regarding the other sacrifices, and possible that the quotations affecting the subjects which are outside the scope of the Soma sacrifice are from such a text. But the probability of such a proceeding is lessened greatly by the fact that the remarks about the Pravargya (xi, 2. 10), the *sarpaṇa* for the Bahispavamāna (xii, 17. 2), and the Rājasūya (xviii, 8. 7) all differ essentially from the *Āitareya* text as we have it, so that the *Mahaitareya* would have to be, not an extended⁴ *Āitareya*, but a different text.

In all likelihood, therefore, we must recognize an unknown Brāhmaṇa as the source of Āpastamba's quotations. Nor really is there anything wonderful in this fact

¹ ĀGS. iii, 4. 4; ŚGS. iv, 10; vi, 1.

² So Vināyaka on *Kauṣītaki Brāhmaṇa*, v, 5.

³ See Eggeling, SBE. xlv, p. xvi, n. 1.

⁴ See Aufrecht, *Āitareya Brāhmaṇa*, pp. v, vi.

Āpastamba cites other practically unknown texts, such as the *Kaṅkati*, *Kālabavi*, and *Pañgāyani Brāhmaṇas*, the *Śātyāyani Brāhmaṇa*, the *Śailāli Brāhmaṇa*, the *Bhāllavika*, *Pāñgāyanikas*, and the *Śātyāyanaka*, but still it is curious that he should have so completely ignored the *Āitareya* and the *Kauṣītaki*.

At the same time, it may be added that there is no clear sign of any knowledge of the *Śrauta Sūtras* of Āśvalāyana and Śāṅkhāyana in Āpastamba; his knowledge of the use of a *Sadasya* by the *Kauṣītakins* is the isolated proof of his knowledge of the usages of that school, though doubtless the *Kauṣītaki* and *Āitareya Brāhmaṇas* were composed long before his *Sūtra*. At the same time the correspondence between three of the citations of Āpastamba and the *Kauṣītaki*, all being points in which the *Āitareya* has nothing similar, is a sign that the *Bahvṛca* school, followed by Āpastamba, had some affinities to the *Kauṣītaki*. And this fact does suggest a mere conjecture, that the *Brāhmaṇa* used was the text of the *Pañgya* school, since *Pañgya* and *Kauṣītaki* are the two authorities most cited in the *Kauṣītaki Brāhmaṇa*. But there is no evidence sufficient to carry this hypothesis out of the region of conjecture. We know, however, that such a *Brāhmaṇa* did actually exist—whether redacted before or after the *Kauṣītaki* is quite uncertain—for apart from the fact that it is referred to in the grammarians it is quoted from by *Sāyaṇa*.

A. BERRIEDALE KEITH.

NOTES ON THE KAUSITAKI BRAHMANA

In Monier-Williams's *Dictionary* there is found the entry *pi-dr̥bh* for *api-dr̥bh*, to adhere firmly to or hope in, with acc., the only form used being stated to be

dr̥bhmas and the reference given being the *Śāṅkhāyana Brāhmaṇa*. The information is not original; it is clear that it comes from Böhtlingk & Roth (iii, 528), who, like Böhtlingk (iii, 71), query the form *dr̥bhmaḥ*, though not apparently the root. The origin of the word is in fact due to Benfey,¹ who extracted it from the form *pidr̥bhya(h)*, which he found cited by Weber² from Vināyaka's commentary on the *Śāṅkhāyana Brāhmaṇa*, ii, 9, with the observation *dr̥bha gumphane; apiḥ pūrvas, tasyākāralopaḥ bahulam chandasiṭi śapo luki rūpam*. Nor is there the slightest doubt that the rendering of Benfey is a clever and quite certain restoration of the meaning of Vināyaka.

But the use of *dr̥bhmaḥ* thus created, which has received recognition, if hesitatingly, even from Whitney, has no real existence. It is an attempt, doubtless of considerable antiquity, as it clearly had inserted itself in the text of the *Brāhmaṇa* long before Vināyaka, who treats it as the received text, to make sense of a passage which was misunderstood and which as it stands in the text of Lindner is still nonsense. The question at issue is that of the offering of the Agnihotra, and regarding it the *Brāhmaṇa* says: *tad dhāpi Vṛṣaśuśmo Vātāvataḥ pūrveṣāṃ eko jīrṇaḥ śayāno rātryām evobhe āhutiḥ hāya-māne dr̥ṣṭvovāca rātryām evobhe āhutiḥ juhvatīti rātryām hīti sa hovāca vaktā smo nu eva yam amum lokam paretya pītr̥bhyo 'tho enaṃ na śraddhātāro yad v evaitad ubhayedyur agnihotram ahāyatānyedyur vā tad etarhi hāyate rātryām eveti etad eva kumārī gandharva-gr̥hītoṣvāca rātryām evobhe āhutiḥ juhvatīti sa hovāca*.

This passage Vināyaka explains in the sense *yam lokam āśrayāmaḥ sa na bhaviṣyati prātārhomābhāvāt*, but he goes on to say that some read *pītr̥bhyaḥ*, which he glosses *pītr̥bhyo yam amum lokam śraddhātāro 'tho enaṃ svārthan na śraddhātāra iti*, which is, of course,

¹ GGA. 1852, p. 134.

² *Indische Studien*, ii, 293, 418.

simply nonsense. What is astonishing is that the origin of all the trouble was not perceived by Lindner, if not by Weber, for the latter actually cited the parallel *Aitareya Brāhmaṇa* version (v, 29), which runs: *Vātāvata uvāca Jātūkarn̄yo vaktā smo va idam̄ devebhyo yad vai tad agnihotram ubhayedyur ahūyatānyedyur vāva tad etarhi hūyata iti, etad u haivovāca kumārī gandharva-grhītā vaktā smo vā idam̄ pitrbhyo yad vai . . . iti.* Surely the sense requires at once that in the *Śāṅkhāyana* we should read¹ for *vaktā smo* *nv eva yam* the simple words *vaktā smo nvai vayam*, whereupon all comes into order and the difficulties of *amum̄ lokam* disappear at once, provided, of course, that *na* in *na śruddhātāro*, which is understood as "not" by *Vināyaka*, is understood as *naḥ*, which one MS. indeed at least reads, and provided that we restore for *enam̄* the form *enan*, which, of course, stands for *enad*. We see now that *pitrbhyo* is a *vox nihili*, a mere attempt to understand the construction of *lokam*, which seemed to stand unintelligibly with *yam amum̄*; and we are rid of a form as bad as the meaning is impossible.

The passage is of interest for another reason: the comparison of the two versions shows beyond all doubt that the *Aitareya* is the older and more correct: with the disappearance of the contrast of *devas* and *pitṛs* the sentence regarding the *kumārī* becomes without basis or foundation. This is another proof for the superior antiquity of the *Aitareya*, especially when it is borne in mind that v, 29 occurs in a chapter clearly appended to the main body of the text.

The passage is further of value since it contains shortly further on a comparison of day and night to a *devasenā* as *adhvagā*: it then continues *tad yathā pakṣābhyām̄ kṣipram*

¹ Cf. Aufrecht's note on AB, v, 29, which has been overlooked by Lindner and the dictionaries, while apparently Aufrecht has overlooked Weber. The *Ānandāśrama* edition (1911) reads *vaktāsmo* as one word.

adhvānam anvīyāt. Here *pakṣa* has not certainly the sense of "wing of an army", and it may be suggested that, as in the case of the *Bhāradvāja Gṛhya Sūtra*,¹ the sense "side horse" may be meant, the point being that the use of two such horses would secure rapid progress. But the sense is not admissible: the *devasenā* is possessed of two *pakṣasī*, and these are probably not so much the "wings" of an army, as taken by Böhtlingk & Roth (v, 368), as the two wings of an arrow, the feathers at the ends to secure sure flight. The subject, therefore, of *anvīyāt* is not a "man", but the *senā*, and here the *senā* is not "army" but "missile", as often in the older language. The same view is supported by a consideration of the later passage (vii, 7) in the Brāhmaṇa where *ubhayataḥpakṣas* and *anyatarataḥpakṣas* of a chariot are contrasted. The temptation here to see the difference between one and two horses is considerable, but the parallel phrase *ubhayataś-cakra* (e.g. *Āitareya Brāhmaṇa*, v, 30. 1; 33. 4) shows that it is needless to seek any such unusual sense, and *pakṣas* as the side of a wagon is the natural sense in *Atharvaveda*, viii, 8. 22.

Another passage in Lindner's edition which presents grave difficulties is the reading in i, 1: *sa yadiha vā api svaiṣā vīra iva sann agnīn ādhatte kṣipra eva sambhavati*. This is no doubt the version of Vināyaka, but it is impossible to translate it otherwise than "his own wife, being as it were her husband", which would be a very remarkable example of feminine sacrificial activity. The first obvious correction is to replace *yad iha* by *yadī ha*; for some unknown reason Lindner always writes *yad iha* in this common phrase. The second correction is to read *svaiṣāvīra* as a single word and to translate with Weber² "wenn er auch als ein ganz schwächlicher Mensch".

¹ See JRAS. 1914, p. 1085.

² *Ind. Stud.* x, 133; cf. *Vedic Index*, i, 123. The Ānandāśrama has the wrong reading.

In iv, 4 the MSS. and the commentator, with the exception of the MS. M., read *nāśane kāmam āpaiti somam rājānam candramasam bhakṣayāmīti manasā dhyāyann aśnīyāt*; Lindner reads *āpeti*, which is ingenious, but he should have adopted *āpayīta* from M., a reading entirely in keeping with the style of the *Kauṣītaki* and much better and more simple sense, while it is obvious that efforts to remove a supposed impossible form created the monstrous *āpaiti*. Lindner must have overlooked the fact that the *Śāṅkhāyana Śrauta Sūtra* (iii, 8. 13-15) has 13 *havirucchiṣṭāśanaḥ* 14 *na saukītyam prāpnuyāt* 15 *somam rājānam candramasam bhakṣayāmīti manasā dhyāyann aśnāti*. The *Ānandāśrama* edition has *āpayati*.

The passage xxvii, 1 presents special difficulties, which have not altogether been removed by Aufrecht's handling of it.¹ It runs *utsrjyate daśame 'hany anuṣṭub vāg anuṣṭup saīṣā vāk pra tad ohuṣi krūravaheva*² *bhavati . tasmād utsrjyate ned vācam āsīdāmeti . atho sarvāṇy evaitac chandāmsy anuṣṭubham abhisampādayanti tad enām*

nāhaivābhīmṛṣe śūdrām
no enām prasiṣṛkṣāni
no tv evānyatra yāmaki
puṁścalyā ayanam me 'stīti

anuṣṭub bhy eṣā daśame 'han pariṣṭitā.

Now Aufrecht recognized, what is certain, that *yāmaki* is *yāmi* with the inserted affix *ak*, which is recognized by the grammarians,³ but he treated the passage as it has always been treated, as prose, and rendered it, "Deshalb will ich einerseits sie wieder berühren, weil ich mich mit keinem (lärmenden) Çūdra-weibe befassen will; noch gehe ich zu einer ganz verschiedenen Form über, sonst

¹ ZDMG. xxxiv, 175, 176.

² *Krūravaheva* preferred by Aufrecht and read in the *Ānandāśrama* edition seems to ignore the word *ohuṣi*.

³ *Mahābhāṣya* on Pāṇini, v, 3. 68; *Kāśikā* on v, 3. 77.

würde man von mir sagen, ich gliche einer lockeren Dirne." To get this sense he has to read *prasisakṣāṇi* (Vināyaka has *prasāṅgenechāmī*), to ignore the metre, which forbids us to take *śūdrām* with *no enām*, and to take the last *itī* as introducing a quotation of the last line only, and to supply the sense "sonst würde man von mir sagen". It is also probable that as well as *prasisakṣāṇi* it would be necessary to read *net* to secure the sense aimed at. *Prasisakṣāṇi*, if read, would be irregular in form.

Now *itī* can only refer to the whole stanza, and it can be taken in two ways: either it can give the reason for *abhisampādayanti* and the words following be referred to the anuṣṭubh generally, or less probably, *anuṣṭub bhyeṣā* means the verse just cited and *parigītā* means that it is a Yajñagāthā, a term found in the Brāhmaṇa xviii, 3. This interpretation did not suggest itself to Aufrecht, doubtless because he did not see in the words a verse, but that it is a verse is quite undeniable. No accident can account for its structure otherwise. The words *tad enām* are, it seems, prefixed to it to adapt it to the sense desired, the verse itself being complete but not in contact with the context. The first three lines then give satisfactory enough sense, as the anuṣṭubh is not used openly, but all is reduced in terms of counting to anuṣṭubh verses. The last line, however, presents most serious difficulties. It is clear that it describes what he does, not what people would say of him if he did otherwise, and the parallel as it stands is not easy to work out satisfactorily if *punīscalyā ayanam* is taken as a subjective genitive. The other course is to take it, contrary to the normal use, as an objective genitive, and to hold that as a Śūdrā the speaker is unwilling to approach her, but nevertheless cannot give her up for good, in which case a fair sense is attained. It must be noted that if Aufrecht's version is kept it is still very difficult to see the point of the mention of a Śūdrā

and the comparison with a *punīscālī*, so that there is no superiority in his version in this case.

Another point of interest in the *Kauṣītaki* is its mention of a passage which occurs only, so far as recorded, in the *Maitrāyaṇī Saṃhitā*; it is in iii, 4, where we read *nātrāgnīm hotrād ity āha*, which must refer to the divergent ritual practice of another school, and in point of fact the *Maitrāyaṇī* has in iv, 10, 3 this mantra, and nowhere else does it seem to be given, so that it is reasonably probable that we have a case of use of the *Maitrāyaṇī*, as is quite natural. That a *Pratika* is meant is not recognized by Lindner and also not by the *Vedic Concordance*, which has corrected many of Lindner's omissions.

In another passage a mere redivision of the text will yield sense out of nonsense: in xvii, 9 Lindner has *ārephantaḥ śuyīraṃs tān ha tac ceṣṭīm tanvā iti pāpmā nāpadhṛṣṇoti*. The sense of *ceṣṭīm tanvā* is not obvious; the MSS. read *tac ceṣṭīm tinvā*, or *vitacceṣṭan tinvā*, or *tac ceṣṭam tinvā*. Clearly they mean no more nor less than *tac ceṣṭanti nvā*, and the sense is obvious: the evil one does not *apadhṛṣṇoti* because he reflects that those, who are lying *ārephantaḥ*, *ceṣṭanti nvai*. Nevertheless the Ānandāśrama edition reads as in Lindner's text.

A. BERRIEDALE KEITH.

THE DENARIUS AS A PROOF OF DATE

In his excellent work on the history of Indian literature¹ Professor M. Winternitz states that works in which the Roman denarius is mentioned as *dīnāra* cannot have come into existence before the second century A.D., as these coins could only have reached India through the Greeks, and the pronunciation of *ē* as *i* began first in the period of the empire, a view which he accepts from Professor J. Jolly in his *Recht und Sitte*²

¹ *Geschichte der indischen Litteratur*, ii, i, 216, n. 4.

² p. 23.

in the *Grundriss der indo-arischen Philologie und Altertumskunde*.

But this argument, whatever its justification when Professor Jolly's book was written, cannot possibly be accepted. To the arguments adduced in an earlier note in this Journal (1907, pp. 681-3) I would now add that Professor A. Thumb, in the fourth edition of K. Brugmann's *Griechische Grammatik* (which in its second edition with G. Meyer's *Griechische Grammatik* (now out of date) formed Jolly's authority), expressly states (§ 9) that *i* and *e* were often interchanged in the Hellenistic Greek of Asia Minor and Egypt, and (§ 11) that in the Hellenistic period *ē* approximated more and more to the *i* vowel, as the interchange with *ei* and *i* on papyri after the middle of the second century B.C. shows, though he thinks that the complete identification of the two sounds belongs to the conclusion of the ancient period of Greece. This is abundantly adequate to show that the transliteration *dīnāra* need not be later than the beginning of the Christian era.

That the *Avadānaśataka* in which the word occurs is earlier than the second century A.D. I do not wish to contend, but merely that the use of *dīnāra* does not compel us to assign it to that date as an upper limit. *Dināra*, as is well known, occurs in the present text of the *Kalpasūtra* of Bhadrabāhu.¹

A. BERRIEDALE KEITH.

SANSKRIT INSCRIPTION OF THE ROYAL ASIATIC SOCIETY

This inscription is on a stone block standing in the hall of the Royal Asiatic Society, and the writing covers an area of about 3 ft. 7 in. in width by 1 ft. 2 in. in height. The characters are of the Northern type called Lantsa, nail-headed, and similar to those used in many MSS. from

¹ See Jacobi, SBE. xxii, 232; Jolly, SBE. xxviii, pp. xvii, xviii.

about the twelfth to the fourteenth century. It is only the first part of a record, so that its exact purport is not clear. The following is an abstract of the contents :—

LINE.

1. Introduction.
2. Praises of Chōḍa-Gaṅga, whose empire extended from the Gōḍāvarī to the Ganges.
- 2-4. Praises of his descendant Anaṅga-Bhīma, a great warrior, who overcame a Yavana enemy.
- 4-5. Eulogy of the charms of Bhīma's daughter Chandrikā.
- 5-6. Eulogy of the valiant Haihaya prince Paramardīn.
6. Praise of the land of Utkala (Orissa).
- 6-7. Panegyric of the sanctuary of Ekāmra (i.e. Bhuvanēśvara in Orissa).
8. Description of the lake Bindu-saras at Ekāmra.
- 10-11. In the reign of Bhānu-dēva, the son of Narasiṁha-dēva, in the Śaka year 1100, the princess Chandrikā built at Ekāmra a temple to Viṣṇu.
- 12-13. The dedicatory inscription of the temple was written by Umāpati.
13. Bhīma addressed Chandra-dēvi.
- 13-14. The accomplished and pious Chandrikā was given to the Haihaya prince Paramāḍi.
15. Paramāḍi fought against the enemies of Narasiṁha-dēva, and pursued them even into the other world (i.e. he fell in battle).
- 15-17. Chandrikā visited the temple of Viṣṇu at Ekāmra, and there paid worship with great magnificence to Balabhadra, Kṛishṇa, and Subhadra.

The persons mentioned are : Chōḍa-Gaṅga (Ananta-varman), the East Gaṅga king of Kaliṅga-nagara, who was crowned in 1078 and died about 1142; his great-grandson Anaṅga-Bhīma; the latter's daughter Chandrikā-dēvi, and her husband the Haihaya Paramardīn or Paramāḍi; Narasiṁha-dēva I, the son of Anaṅga-Bhīma; Narasiṁha's son Bhānu-dēva I; and the poet Umāpati. The exact sequence of events is not clear.

L. D. BARNETT.

THE PURANIC HISTORIES OF THE EARLY ARYAS

In JRAS. 1914, pp. 267 ff., Mr. Pargiter published a history of the Indian Āryas antecedent to the great war of the Kurus and Pāṇḍavas, basing it entirely on the Epic and Purāṇas. It was a formidable task. One would think it easier to construct a history of the early Greeks from the wars and genealogies and adventures of the Herakleids and the descendants of Erechtheus. Fortunately for us Mr. Pargiter is thoroughly master of his materials, and has produced a history amply supported by his authorities. For the first time the legends and traditions of the Purāṇas have been woven into a consecutive and intelligible whole.

And now, the work being done, the question arises: What is the value of this traditional history? Are these traditions genuine? Are we to put them on a level with the traditional history of England from the time of Brut, as related by the veracious Geoffrey of Monmouth, and to consider the genealogies on a par with the Holyrood portraits of the successors of Fergus McAlpine? Or shall we consider them as, in part at any rate, genuine traditions, containing elements of truth, although intermixed with much that has been intentionally fabricated? That is the question to which I address myself, and I promise to treat it chiefly from the standpoint of ethnology. Of the literary questions discussed between Mr. Pargiter and his critics I am not a competent judge, and with those questions this paper has nothing to do. I would merely remark that the Epic and the Purāṇas in their present form are admittedly late. The Epic, according to Professor Hopkins, first took shape c. B.C. 400–200, and was not completed for several centuries later;¹ while "there is no reasonable probability of the existing Purāṇas antedating A.D. 300"; so says Professor Keith.² The traditions, therefore, do not derive any weight from external

¹ Hopkins, *Great Epic of India*, p. 398.

² Keith in JRAS. 1914, p. 740, n. 1.

authority; they must depend entirely on their own intrinsic evidence.

Mr. Pargiter has appended to his paper a map showing the final distribution of the Lunar, Solar, and Yādava kingdoms. The most superficial consideration will show this map to be a politico-ethnographical one. The Druhyus are the Indo-Afghans, the Ānavas the Indo-Aryans of the Panjāb. Ānarta includes Southern Rājputānā, Mālwa, and Gujarāt—countries politically connected with Kanauj before and after the commencement of the Christian era, but, owing to the rise of the Rājputs in the eighth century A.D., now partly Indo-Aryan. Kosala, Videha, and Vaiśāla are inhabited by the speakers of Eastern Hindi or Behāri. Kāśī ought to be included in this group, but is artificially separated from it, in order to connect it with Madhyadeśa. Bengal and the Dekhan stand outside all these. In a word we have here an ethnographical table very similar to the one in the 10th chapter of Genesis; and the example of Josephus¹ shows us how the original data may have been stretched to embrace later knowledge and new conditions.

I regard this table as a very valuable document. It proves that the population is now ethnically much the same as it was at the commencement of the Christian era, and for some time before it. The ethnographical survey of India divides the Indian Aryans into two groups—the Indo-Aryans of the Panjāb and Rājputānā, and the Aryo-Dravidians of the United Provinces and Bihār. When the hymns of the Rig Veda were composed, the Āryas were homogeneous. Before this table was drawn up all the present differentiations were complete. We know through the Greeks that the Indo-Aryan type has not materially changed since the days of Alexander, but the present table is the earliest document, so far as I know, to throw light on the Aryo-Dravidian.

¹ Josephus, *Antiq.* i, c. 6.

And next I note that this Puranic history is not only an Aryo-Dravidian production; it is a production of Madhyadeśa in the most limited signification of that term; other legends and traditions have been partially woven in, more especially the legends of the Yādavas and Haihayas; but the main subject is the history of Madhyadeśa. Round this the history revolves; to Madhyadeśa the history returns. The compilers cared little for anything outside Madhyadeśa and the Yādavas. The traditional history of the Panjāb, as we shall presently see, is a purely artificial production, and the Solar line of Ayodhyā is thrown into the shade. And yet it was from Kosala and Ayodhyā that the first Aryan expedition set out to explore Southern India, an expedition as famous as that of the Argonauts, while Rāma is the god and hero *par excellence* of half the Aryo-Dravidians.

A striking peculiarity of these traditions is their complete obliviousness of the Aryan invasion through the Kābul Valley and the Panjāb. Before this could happen the fusion of Āryas and Dravidians must have been so complete that all sense of a foreign element in the former must have disappeared. For the Dravidians, of course, the history of the Aryan immigration by way of the Panjāb had no interest. Mr. Pargiter brings out the disappearance of this consciousness very clearly. He says, indeed, that tradition brought Purūravas from the middle Himālayan region. But the evidence is very weak. It consists chiefly in the connexion of Purūravas with the Gandharvas,¹ and belongs wholly to the region of pure myth. In any case the thing is impossible. Nothing can be more certain than that the Āryas entered India by way of the Kābul Valley and the Panjāb. If there were nothing else the evidence of ethnology would prove it. Physically the Indo-Aryan belongs to the type of the Mediterranean man; he is its most eastern representative.

¹ JRAS. 1914, pp. 291-2.

Strabo, one of our oldest authorities, compares him to the Egyptian.¹ And Ripley, one of our most recent, says there can be no doubt of his relationship to the Berber, the Italian, or the Spaniard.² In stature the Indo-Aryan agrees with the Śaka, and Pumpelly's excavations at Anau on the Trans-Caspian Railway show that *Homo Mediterraneus* was one of the oldest—indeed, so far as we yet know, the very oldest inhabitant of the Turkeṣṭān steppes. We have therefore good reason to conclude that the Āryas came from Turkeṣṭān. But besides the evidence of ethnology there is the direct evidence of the Rig Veda, which is sufficient in itself, as well as the inferences to be drawn from the irruption of Āryas into Iran in the early centuries of the second millennium B.C. The matter appears to be beyond dispute.

On the other hand, the passage of the Āryas into India by way of the Central Himālayas is a physical impossibility. The Āryas were very numerous; there seem to have been over forty tribes and clans. How could they transport themselves, their wives and their children, their cattle, their horses, and their chariots over passes which are crossed with difficulty by small bands on foot? There are not, so far as I remember, more than two, or possibly three, passes in Kumaon and Garhwal, over which ponies can be transported, and that with some difficulty. But these snowy ranges were the abode of the great gods, and from these snows the Ganges was born. To connect the imaginary Purūravas with the snows and Mount Meru and the Northern Kurus would be most natural to the Hindu mind.

And now to come to the legends themselves. We are dealing with stories not unlike those with which Greeks and Romans loved to embellish their antique history. Rāma's expedition to Ceylon recalls the Argonauts; the

¹ Strabo, xv, p. 690.

² Ripley, *The Races of Europe*, p. 451.

battles of Pāṇḍavas and Kurus, in which "auxiliar gods" and heroes take a part, remind one of Troy. Archæology has helped us out in Italy and the Ægean, but in India we cannot expect its aid. Āryas and Dravidians were in the chalcolithic or rather neolithic stage. We say neolithic for want of a better word, but there is neither rock nor pebble to be found throughout the vast alluvial plains of Hindustān. What criteria, then, shall we apply?

The criteria which recommend themselves to me are two: the eponymous hero, and the genealogical relationship asserted between different tribes. Primitive men rarely, perhaps never, conceive of a great country, the Panjāb for instance, as a whole; they name a tract after the people who inhabit it, or they give it a descriptive title. Thus we have Kurukshetra, the land of the Madras, the country of the five rivers. It is only in a more advanced stage that they arrive at the conception of a country inhabited by various peoples, as a unity, and give it a common name; and when they do they invent for it and its inhabitants a common ancestor. This is the eponymous ancestor. A felt community of interests is only conceivable as a community of blood.

The same remark applies to my second criterion. You create an eponymous ancestor for a whole country to which he gives his name; or he is the imaginary ancestor, generally heroic or divine, of a tribe or gens. And under him you express in a genealogical table the community of interests between different tribes. It is not necessary even that the tribes should be of the same race; they may merely live side by side. Greek examples readily occur; but the 10th chapter of Genesis furnishes perhaps the best illustrations of this process. Canaan begets Sidon and Heth and the Jebusite and the Amorite. But the Hittites were not Canaanites at all, but of a totally different race; and the Amorite may have been Libyan by origin.

Now these Puranic histories supply us with numerous examples of this artificial fabrication of legend when dealing with what I call the outer belt. Anu is the eponymous hero of the Panjāb; he is the father of its peoples, and he gives his name to the country. Ānarta, Karūsha, Avanti, Vidarbha, Gandhāra,¹ all these are eponymous heroes. But for Madhyadeśa, the Middle Country, we have no eponymous hero; only an occasional king, like Hastin, who gives his name to a town; and that is a thing not only credible, but highly probable. So far, therefore, the accounts of Madhyadeśa ring truer, they are less obviously artificial than the rest.

The Panjāb furnishes the best illustration of our second test. Anu is the father of all the tribes of the Panjāb, and these begin to migrate from Madhyadeśa into the Panjāb under Uśīnara, who is in the eighth generation from Anu. Two of Uśīnara's sons found the principalities of the Yaudheyas and Āmbasthas; two others found minor kingdoms; while his eldest and most important son is Śīvi, the founder of the Śīvis. Śīvi, again, begets four sons who each start a clan—the Madrakas, Kaikeyas, Sauvīras, and Vṛishadarbhas.² Here we have a list of the principal clans of the Panjāb arranged in genealogical succession. But the Śīvis and the Uśīnaras are as old as the Anus; their names occur in the Rig Veda;³ and the kings of the Śīvis and the Anus fought together against Sudās, and were together drowned in their flight. The Āmbasthas appear somewhat later in Vedic literature. Āmbasthas and Kaikeyas inhabited the Rawal Pindi country and Gandhāra in the days of Alexander, while Yaudheyas are first mentioned by Pāṇini, and were a very powerful tribe from the first century B.C. to the end of the fourth century A.D.⁴ The Yaudheyas occupied both banks

¹ JRAS. 1914, pp. 270, 277, 279, 282.

² JRAS. 1914, pp. 276, 277.

³ Macdonell & Keith, *Vedic Index*, s.v.

⁴ Cunningham, *Coinage of Ancient India*, p. 75.

of the Satlej, displacing the Malloi and Oxydracæ. The omission of these two great tribes from the genealogical tree may perhaps be taken as a note of time. If so, this whole history of the Panjāb must have been written up after the second century B.C.; how much later it may be, I cannot say.

The traditions of the Yādavas and the Yādava clan of the Haihayas do not offer very many instances of intentional fabrication. Of course, the raids of the Śakas, Pahlavas, and Yavanas into Central Hindustān are an obviously late interpolation, although Mr. Pargiter does his best to defend his authorities.¹ The Yavanas are impossible, the Pahlavas practically so, and although Śaka raids are possible they are most improbable. Another notable point is the antiquity assigned to these Yādava legends. If we omit the imaginary Purūravas and his immediate descendants, the doings of the Yādavas take precedence of all the rest. There may possibly be some truth in this. The Yādavas are a great clan in both Vedic and Epic literature. They were settled partly in the North Doāb, partly on the western bank of the Jamnā about Mathurā. Tradition is doubtless right in assigning to them (along with the Matsyas, who do not figure in these stories) the principal part of the Aryanization of Southern Rājputānā, Gujarāt, and Mālwa. These countries must have been thinly peopled in antiquity, just as a large part is thinly peopled at the present day, and the Āryas probably overran it without much difficulty. The case was very different with the other two great centres of Aryan influence. The Āryas of Kuru-Pañchāla and of Kosala and Videha had to do with the dense population of the Gangetic basin, and with peoples whose civilization was little inferior to their own. Their progress in dealing with these masses was likely to be slow.

¹ JRAS. 1914, p. 280.

I turn to the history of Madhyadeśa. It falls into two parts. The mythical Purūravas and his immediate descendants occupy the first page of all history; they were at the beginning of things; and by them and their descendants the whole of India was subdued. Purūravas, the grandson of Manu, with his Gandharvī wife, who became a Gandharva himself, is obviously not an ordinary human being.¹ He is purely mythical. Purūravas founds Pratiṣṭhāna (Allahabad); his two sons are the founders of Kāśī and Kanauj. Purūravas' grandson Yayāti is the father of Yadu, Turvasu, Druhyu, Anu, and Pūru, the five greatest and most famous of all the Aryan tribes.² These five go on their own way to take possession of the land, and the history follows them, and does not return to the direct Panrava line till near the end. The obvious purpose of this introduction to the history of the Āryas is the exaltation of Allahabad, Kāśī, and Kanauj. Indeed, as Yayāti was King of Kāśī, and from him all Hindustān was Aryanized, Kāśī becomes the Aryan *omphalos*. The Śatapatha-Brāhmaṇa clearly says how Kosala, Kāśī, and Videha were Aryanized; and its statements are confirmed by both ethnology and philology. The claim made by the Purāṇas for Kāśī is absurd—a barefaced invention of the Pundits. But it is noteworthy that no attempt is made to represent Purūravas and his two sons as having given their names to Allahabad, Kanauj, or Kāśī. They are not to be regarded as eponymous founders. Possibly the story of Purūravas was invented when an attempt to foist them on these ancient towns would have been difficult.

The Puranic history begins with the mythical Purūravas; it ends with Dushyanta and his descendants, who immediately lead up to the Great War.³ This latter

¹ JEAS. 1914, pp. 271, 291, 292.

² JRAS. 1914, p. 273.

³ JRAS. 1914, pp. 283-4, 288-9.

part appears to me to contain more elements of truth than all the rest. It bears no obvious marks of intentional fabrication, and it gives us what appears to be a probable enough history of the Āryas in the North Doāb and Rohilkhand. It is really a history of the Bharatas; how they occupied the North Doāb; and coalesced with their neighbours and ancient enemies, the Pūrus. They take possession of North Pañchāla, which according to the Purāṇas was Krivi country. Finally, the Kurus, a royal sept, and possibly not unconnected with the Krivis, came to the kingship. All this is a probable story, and it has the support of the Rig Veda. The Puranic history is told in legendary fashion; fable and invention have taken possession of some old well-remembered names, and one cannot quote the details for fact; but the general outline seems correct.

The conclusion of the whole matter appears to be this. I find in Mr. Pargiter's essay a document of first-rate ethnographical importance, the oldest we have regarding the distribution of the Indian Āryas after they had permanently settled in their present seats. And in the next place it gives us a picture of the way in which Aryan, or more correctly Aryo-Dravidian, adventurers set up Aryan kingdoms throughout Madhyadeśa and the rest of Northern India outside the Panjāb, Eastern Oudh, and Northern Bihār. The tribal settlements of the Indo-Aryans were in the Panjāb, and on the west bank of the Jamnā. In the Gangetic plain we have the mass of powerful confederated Aryan tribes in the Kuru-Pañchāla country (that is, in the North Doāb and Rohilkhand), and another group of tribes skirting the Himālayas farther to the east and founding the kingdoms of Kosala and Videha. From the Yādavas of Mathurā and the Matsyas of Alwar, Southern Rājputānā and Mālwa were Aryanized; while bands of military adventurers belonging to the Kuru-Pañchāla and the Eastern Āryas Aryanized the

Dravidians of the Gangetic plain. The early settlements had been tribal, and the land they occupied was the least populous and therefore the easiest to acquire. The further progress of the Aryan tribes south and east was barred by a larger and more powerful Dravidian population. Among them came warlike Aryan chiefs with their followers, carving out kingdoms for themselves. This is, I think, the picture which the Puranic legends suggest; it is probable itself, and in accordance with the history of the Rājputs in Rājputānā, the Doāb, and Oudh during the Middle Ages. The picture has verisimilitude; the exact details we shall never know.

Of course there is another side to this history. Had the Brahmans not come also, the Aryan conquerors being few must have been speedily absorbed. It was the Brahman who brought with him Aryan civilization and traditions, and introduced the institutions of caste. Brahman missionaries paved the way, Brahmans accompanied the conquerors, Brahmans converted Dravidian potentates, and enabled them to intermarry with the high-born Āryas. The Aryan spirit was kept alive by the Brahman, who owed everything to his Aryan heritage, not by the exogamous semi-Aryan semi-Dravidian military chief. But without the protection of the chief the Brahman was powerless, and it was not the Brahman's "peaceful penetration" but the military exploits of the chief that enthralled the popular imagination. Every nation has its Pāṇdavas, its Rolands, and its Arthurs.

J. KENNEDY.

IRREGULARITIES IN THE PURANIC ACCOUNT OF THE DYNASTIES OF THE KALI AGE

Professor Keith's note on "The Dynasties of the Kali Age" (p. 328 *ante*) is a reply to my note (p. 141 *ante*) and calls for notice.

With regard to the word *bhaviṣye* in the four lines set out (pp. 141-2), he contested my view that it means "in the Bhaviṣya Purāṇa", and asserted that it means "in the future".¹ I invited him (p. 142) to prove his assertion by putting it into a plain and straightforward translation of those lines. He has declined this very simple test. He offers this statement instead: "*Bhaviṣye kathitān* has precisely the same sense as the *v.l.* of various MSS. (above, 1914, p. 1023), *bhaviṣyān*; the kings are told of as *future* kings or told of as kings *in the future*. I take the obvious view that *bhaviṣye* and *bhaviṣyān* have the same sense as in *bhaviṣyā ye nṛpās tathā*." Thus he now asserts that *bhaviṣye*, a locative standing all by itself, has the same sense as *bhaviṣyān* or *bhaviṣyāḥ*, an adjective qualifying "kings". If the matter is so obvious, why did he withhold a plain and straightforward translation? His positive assertion that *bhaviṣye* means "in the future" now turns into the assertion that it has the sense of "future" as an adjective to "kings". So he has shifted his ground, and grammar is ignored. It is clear, therefore, that *bhaviṣye* does not mean "in the future". Moreover, it does not mean "future" as applied to "kings", because it does not agree with *nṛpān* in the first three lines nor with *te* (i.e. kings) in the fourth, though there was no difficulty in the author's saying *bhaviṣyān* and *bhaviṣyās* respectively, if he meant the word to qualify "kings", as in the phrase *bhaviṣyā ye nṛpās tathā*, which Professor Keith quotes. The fact that the author avoided that construction in all four lines proves that that was not his meaning. He coupled *bhaviṣye* with past participles,² and speaks of the kings who were *kathita*, *paṭhita*, or *prasāṅkhyāta* in the *bhaviṣya*, so that the meaning "future" makes

¹ JRAS., 1914, p. 1023.

² So Professor Keith himself couples *bhaviṣye kathitān* at the beginning of his statement quoted above; and quite rightly.

nonsense. *Bhaviṣye* therefore can mean nothing else than "in the *Bhaviṣya Purāṇa*".

Next, as regards the line *atha Māgadha-rājāno bhavitāro vadāmi te*, my view was that "*rājāno bhavitāro* are accus. after the verb *vadāmi*, and that the line is Pali and not Sanskrit. Professor Keith said, "This is a pure blunder; *vadāmi te* are not in the construction as often";¹ that is, his assertion was that *vadāmi te* are not in construction with, but are independent of, the preceding words—in which case "*rājāno bhavitāro* would be nominatives. The simple question then was, whether these words, which are nomin. in form, are really accus. or nomin. I pointed out that an alteration made in the text proved that they were regarded as accus. (p. 145); and a further proof may be added, namely, that the commentators explain them as such. Thus Virarāghava says, *Māgadha-rājāno Magadha-deśādhipatīn bhāvinas te tubhyaṁ vadāmi*.²

Professor Keith replies quoting, as a parallel in his support, the line from the *Bṛhaddevatā* (iv, 32) *sūkte 'sya rei parokṣoktā vakṣyāmi bhrātaraś trayas* (p. 333). I may add an earlier passage from the same work (i, 28), *taḥ chr̥ṇudhvaṁ ca hetavaḥ*, and supply what he omits, namely, Professor Macdonell's critical remarks in his edition of the work. Professor Macdonell has preserved the nomin. form of the expressions in his translation,³ but in his critical notes he shows their true nature. On the earlier passage he says, "The evidence of the MSS. is so strongly in favour of the ungrammatical use of the

¹ JRAS., 1914, p. 1028.

² So also *Nityasvarūpa* in Hindi, *ab Magadh-deś ke rājās ki samantī mai tum se kahā hū*. Śukadeva virtually implies the same, *atha bhaviṣyān Māgadhadhipān vaktum pratijānīte*. I have to thank Sir G. Grierson for these extracts.

³ He translates the passages thus: "In the stanza 'Of this' (*asya*: i, 164. 1) in the hymn, three brothers are spoken of in the third person (*parokṣa*)—I will explain (them)"; and "and so hear (what) the reasons (are)".

nom. for the acc., that I have retained it as an original inaccuracy (due perhaps to the metre)"; and on the later, "Another instance of the nom. being loosely used for the acc." (citing the earlier passage). He thus declares that these nominatives are used for the accusative, so they are not independent of the verb: and that *hetavaḥ* was regarded as really an accus. appears from his note that two MSS. read instead *hetutaḥ*, which "looks too much like a correction"; so that there also the necessity for alteration was felt. The very passage, therefore, which Professor Keith quotes in his own support, proves in Professor Macdonell's words "the ungrammatical use of the nom. for the acc." It therefore tells against his assertion that the verb is independent, and supports the commentators' view and my own, that *ṛājāno bhavitāro* are really accus. governed by *vadāmi*. He ignores Professor Macdonell's criticism; it shows where the blunder is. What is ungrammatical is not Sanskrit in the ordinary sense of the word. That the line is good Pali he has not denied.

These two matters that I have discussed are very simple—questions of mere grammar and the meaning of words. On the first he has shifted his ground. On the second he wholly ignores Professor Macdonell's opinion on the passage he has cited, an opinion in which Professor Macdonell expressed a critical and unbiassed view when he edited the *Bṛhaddevatā* and which merited notice. Previously Professor Keith twice charged me with misunderstanding his arguments, and when I pointed out that the charges were unfounded, the truth being that he had shifted his ground,¹ he offers as an explanation what is a fresh statement.² Further, I pointed out

¹ First JRAS., 1914, pp. 739-42. Secondly, JRAS., 1914, pp. 739, 742-3, 1031 note; 1915, p. 143 note.

² pp. 330-1 *ante*, which do not really explain his shifting of his ground, as will appear from comparing the pages cited in the preceding note and noting what his ground was originally.

that he had given an incorrect version of Professor Macdonell's statement,¹ and this he has passed over without acknowledgment.

In such conditions discussion is unprofitable, and I do not propose to carry it on upon the other points in his reply beyond saying, first, that anyone who is interested in those points can see, on comparing his reply carefully with all the arguments and questions that I put as clearly as I could in my note (pp. 142-7), whether he has really met them; secondly, that, where he charges me with fresh misunderstanding, it is well to examine his position; and thirdly, that in his discussion on p. 331 (which has very little to do with this dynastic account) he has ignored the burden that rests on him to prove the value of brahmanic tradition in historical matters.²

I must make a correction in the first footnote on p. 142, "*Path* in the Purāṇas always implies writing, as far as I am aware." This is incorrect, for I overlooked the fact that it is used with regard to mantras and applied sometimes to the gods. I therefore frankly acknowledge my mistake and apologize for the over-statement.³ I withdraw that remark, and say only this now (so as not to err by over-statement), that *path* in the Purāṇas often implies writing.

¹ JRAS., 1914, pp. 739 and 742-3, where the statement is quoted; 1915, p. 142, n. 2. Professor Keith's remarks on p. 331 *ante* do not touch the statement which is the important fact, but refer to the reason which I did not discuss as being secondary (JRAS., 1914, p. 743). His new rendering of his words (p. 143, note) still corroborates that statement.

² JRAS., 1914, p. 743. The "total lack of the historical sense" is a fact, apart from any explanation of it. His reference to pessimism on p. 331 conveniently ignores the fact.

³ I had prepared a note to correct the mistake, and sent it in for publication in the last part of the Journal before I knew that Professor Keith had written his reply; but, as he had sent that in, it was considered better that my correction should wait and be incorporated in this my reply. Otherwise it would have appeared at the same time as his reply.

This correction does not affect my argument about the word *bhaviṣye* in this note or in my former note (pp. 141-2), because in both places I have used the word *paṭhita* without translating it, and the argument holds good even if *paṭhita* be rendered "mentioned", "declared". Hence the conclusion that *bhaviṣye* can mean nothing but "in the Bhaviṣya Purāṇa" stands valid. The Matsya and Vāyu have two lines in common; and the Matsya reads in both (pp. 141-2) *bhaviṣye kathitān nṛpān*, but instead of *kathitān* the Vāyu reads *paṭhitān* in the first (p. 141) and *tāvato* in the second. Thus *kathitān* and *paṭhitān* are applied to a composition, a Purāṇa. The variations were evidently made by the Vāyu, and especially so since its account is later than that in the Matsya; so that *paṭhitān* is an intentional change, and therefore differs from *kathitān* in meaning and can only reasonably mean "read". Seeing that writing had been introduced into India about a thousand years before the date of the Vāyu account, and that epigraphical remains show it was in wide and general use, this inference is altogether natural and obvious. The dynastic account therefore had been written down when the Vāyu borrowed it from the Bhaviṣya, as I stated (p. 146).

F. E. PARGITER.

AGNISKANDHA AND THE FOURTH ROCK-EDICT OF ASOKA

In a series of interesting notes which Mr. F. W. Thomas is contributing to the pages of the JRAS. this word in the second sentence of the fourth rock-edict of the Buddhist emperor Aśoka occurs as No. 6 on pp. 394 and 395 of 1914. Examining the views of Senart, Bühler, and Professor Hultzsch, Mr. Thomas gives it as his rendering of Aśoka's *aggikhaṇḍa* that it means nothing else than "bonfire".

This rendering may be accepted as correct in a general sense; but it is capable, I think, of a more particular interpretation as a peculiar kind of bonfire. There is a kind of bonfire which is of peculiar appropriateness to festivities of a holy character. In temples in South India there is a particular "festival of lights" celebrated on the full moon of the month of Kārttika (Solar). This is common, with a difference of a day, to both Śiva and Viṣṇu temples alike. A tree-trunk, usually coco-nut or palmyra, according to locality, is planted in the ground, decorated artificially with bunting and festoons, more or less elaborately according to means. The shape given to it is generally that of a car. As soon as the lamps in the temple, in large temples often many thousands, are lighted, soon after it is dark, this tree is set fire to. This is called in Tamil *śokkappanai*, in popular parlance *śokkappānai*. This is composed of two Tamil words—*śokka*, the participial adjective, and *panai*. The first may be rendered either "pretty" or "decorated", and the latter "palmyra". This festival is celebrated in commemoration of the victory of Viṣṇu Trivikrama over the Emperor Bali, whom the former sent into the nether world, having taken up the earth and heaven in 2 paces of the "3 paces of earth" granted to him. It seems to me that Aśoka's *aggikhamda* is exactly the Tamil *śokkappanai*.

There are references in the Tamil classics to palmyra trunks having been made use of for beacon-lights in ports. A tall tree-trunk was planted, with a big lamp of fresh clay on top. Such a one is referred to in the *Pattinappalai* in reference to the city of Puhār at the mouth of the Kavery River. A similar big lamp, but without the palmyra trunk, is lighted on the Kārttika day on the top of the hill at Tiruvannāmalai, and, I am told, is seen for many miles around.

If the third century analogue of this palmyra lamp—and this seems more than likely before Aśoka got into the

habit of planting pillars which eventually developed into the *dhvajastambhas* (flagstaffs) of modern times—be what Aśoka refers to by the term *aggikamāḍha*, which the Shāhbāzgarhi version makes *jotikamāḍha* (*jyōtiskandha*), what then is the meaning of the second sentence of the fourth rock-edict?

Taking the Girnar version of the edict as the standard for the purpose, the first three sentences make the statements that for centuries ill-treatment of God's creatures, want of affection towards relations, and want of affectionate reverence towards Brahmans and Bhikshus had been the normal condition; with the adoption of the Dharma by Aśoka all this gave way to a better order of things; the beat of this great ruler's drums is, lo! really the sound of the Dharma; the sights to be seen under this ruler are the sights of cars, elephants, fire-trees, and such other holy sights; in consequence of these the evil practices of the people have given place to good to such a degree as was never before witnessed. This seems to be the logical order of the ideas. The particle *aho* ("what wonder?") in itself contains a predicate. The beat of drums calling a war muster is only a call to assemble for the celebration of a holy festival. The *vimāna*, elephants, fire-trees, and other divine forms are what would be seen in place of the war-chariots, fighting-elephants, "fire-trees," and other death-dealing implements of war.

Vimāna in its origin implies an old-world Zeppelin; but processional cars are so called from a fancied similarity of form, these being always constructed on the pattern of the flying-cars of the gods. Hence the name *vimāna* for the tower of the inner shrines or the sancta of temples. These took the place of war-chariots.

Hasti (elephants) are in the one case merely processional and in the other fighting.

Agnikandha (fire-trees), the festival trees described above in the one case, and combustible material prepared

and ready to be lighted and thrown at an enemy, or into his camp, etc., in the other.

Divyāni rūpāni, holy sights (forms of gods), as opposed to the terrible sights of fighting-men and war.

According to the nature of the deity in particular temples and on particular occasions, all the paraphernalia indicated by these terms are to be seen in festival processions in the larger temples of South India to-day. That these were exactly the features of festivals in the early centuries of the Christian era is in evidence in the twin Tamil classics, the *Śilappadhikāram* and *Maṇimēkhalai*, in both of which is given a rather elaborate description of a festival to Indra. This is a festival lasting for twenty-eight days in all, and seems the one indicated in the *Raghuvaṃśa* of Kālidāsa in the śloka

“Puruhūta-dhvajasyeva tasyōnnayanapaṅktayah |
Navābhyutthānadarsīnyō nananduh saprajāh prajāh ||”

“His (Raghu's) subjects, with their children, were delighted at the accession of the new monarch, as people looking with upturned eyes at Indra's flag do.”

The actual form of the *dhvaja* (flag) described in this śloka may explain the particular mention of elephants in the edict.

“gajākāraṁ catuḥstambham puradvāri pratiṣṭhitam |
paurāḥ kurvanti śaradī puruhūtamahōtsavam ||”

This is the flag which had the figure of Airāvāta (Indra's white elephant)¹ painted on it and was kept in the temple of the Kalpataru (the tree that gave whatever was wished for), that was hoisted at the beginning of the festival. The festival to Indra was announced to the people by beat of drum taken from the shrine dedicated to Vajra, Indra's thunderbolt. The beginning and end of the festival was

¹ It must be noted that the white elephant is in a way sacred to the Buddha also.

announced to the elephant itself at the shrine of Airāvata (the elephant of Indra). This intimation is understood to be in token of a request to bring Indra from his heaven.¹ The drum was mounted on the back of an elephant, which carried it round the town, announcing the festival and enjoining upon the inhabitants to do what had to be done by way of decoration. The whole town was to be in festive trim. Houses of assembly and halls of learning had to be suitably equipped, each in its way, for the occasion. Temples, from that of the three-eyed Śiva to that of the guardian deity of the market-place, had to put on festival array. What in all this is pertinent to the question in hand is that this elephant carrying the big drum itself was accompanied by "warriors with bright swords, cars, horses, and elephants", the four proverbial elements of an army.

"Vōḷiruvāṇ maṇuvarum tēru māvuṇ
Kalirūṇ cūṭṭarak kaṇamura ciyampip."

(*Maṇimēkhalai*, i, pp. 68-9.)

On the twenty-eight days when this festival was in progress at Puhār at the mouth of the Kavery not only was it thought that Indra came down from heaven to preside at the festival, but all the *dēvas* in attendance on him also descended to earth, leaving the *svarga* empty of its people.

"Tivakac cānti ceytaru nannā
lāyiraṇ kaṇṇōṇ raṇṇō tāṇkula
nāl vēru tēvaru nalattaku ciṇappiṇ
pāl vēru tēvaru mippatip paṭarntu
maṇṇaṇ karikāl vaḷavaṇṇin kiyanā
ḷinnakar pōlvatō riyalpiṇa tākip
Poṇnakar vaṇitāp pōtuva renpatu
Tonṇilai yuṇarātōr tuṇiporu ḷataliṇ."

(*Maṇimēkhalai*, i, pp. 35-42.)

¹ *Śilappadhikāram*, bk. v, ll. 141-6.

"On the occasion of propitiation of the thousand-eyed Indra for the benefit of this land, along with Indra will descend into the city (of Puhār) the four different orders and the various classes of *dēvas* as well, leaving the heaven of Indra (*amarāvati*) empty of the *dēvas*, just as this city was when the illustrious Karikāla left it."

This passage contains the idea embodied in the *divyāni rūpāni* of the edict. These *dēvas* in their various degrees will find more or less adequate representation in the festive paraphernalia of temples and festivals. From this it will be clear that the *divyāni rūpāni* need be neither more nor less divine than the other items specified. The passage of the edict under discussion can be rendered thus—

"But now, in consequence of the adoption of the Dharma (law of morality) by Dēvānāmpriya Priyadarśin, the sound of the drum is, lo! but the sound of the Dharma; the spectacle presented to the people, processional cars, elephants, bonfires, and others, the representations of the *Dēvas*."

That is, the drum that sounds is no more the war-drum, and the spectacle presented is no more the merciless destruction of God's creatures both in war and in the chase. As a consequence of this change in the conduct of the king, the subjects reverse their previous evil practices to the opposite good ones in accordance with the proverbial *Yathā rājā tathā prajāḥ* (as the king, so the people). This is what exactly is stated in the sentence following in the edict: *Yārisē*, etc.

The following two verses, which Mallinātha quotes in his comment on the verse 3 of canto iii of the *Raghuvamśa*, would go to indicate that the festival to Indra is an old institution;¹ and the way in which the two

¹ [Cf. also Aśvaghoṣa's *Buddhacarita*, i, 63, and Professor Cowell's Introduction, p. xiv.—F. W. T.]

Buddhistic Tamil works treat of this would indicate that this was a cosmopolitan festival in which every one joined.

"Ēvaṁ yaḥ kurutē yātrām indrakētōr, Yudhiṣṭhira ।
Parjanyaḥ kāmavarṣi syāt tasya rājyē na saṁśayaḥ ॥"

"Yudhiṣṭhira, whoever in this manner takes Indra's flag in procession, in his kingdom clouds will pour down as much as is wished for of rain. Of this there is no doubt."

"Caturaśraṁ dhvajākāraṁ rājadvārē pratiṣṭhitam ।
Āhuḥ śakradhvajaṁ nāma pauralōkē sukhāvaham ॥"

"What is quadrangular, in the form of a flag, fixed in front of the palace gate, that they call Indra's flag; it bears with it the happiness of the inhabitants of the city."

The former is from the *Bhaviṣyōttara-purāṇa*.

These explanations in regard to the nature of the festival, the allusion that Kālidāsa makes to it, as though it were a thing familiar to all, the éclat with which the two Tamil poets describe it, and the explanation that the twelfth century A.D. Tamil commentary and the later Mallinātha are able to give of its details go to establish the popularity, as well as the long vogue, of the festival. It would not be surprising if this itself, or something akin to it, had been in existence in Aśoka's time, and if he himself had contributed to rid it of any element of grossness. Anyway, there is no mistaking the light that this festival to Indra throws upon the edict under consideration. If this should in the least contribute towards the elucidation of the particular sentence in the edict, the Tamil poets deserve to be gratefully studied.

S. KRISHNASWAMI AYYANGAR.

THE HOYSALA KING BITTI-DEVA VISHNUVARDHANA

That the initial and final dates of this king's eventful reign should be definitely fixed is very desirable, and any

light thrown on the subject is welcome, but Mr. Narasimhiengar's attempt (*supra*, p. 152) will not, I fear, be of much help. The reign can be properly reckoned only from the time when the king ruled independently in his own name. For although he was associated in the government while his elder brother Ballāla occupied the throne, he was naturally during that time in only a secondary position. The date 1104 A.D. had been adopted as the probable beginning of his independent reign till a record came to notice (Cm 169)¹ which seemed to indicate that Ballāla was ruling in 1106. Hence, in *Mysore and Coorg from the Inscriptions*, I gave that date as his last, and for Vishṇuvardhana inserted the figures . . . 1111-1141, showing, not that 1111 was the initial date, but leaving a space for his first year, which is still uncertain. At the same time, 1111 was explained to be the earliest date that could be actually cited for him. The case of Ak 110, which is dated in "the 45th, the year Dundubhi, month Chaitra", did not escape my notice. But it was rejected as too irregular and uncertain to base any calculation upon. There is no indication as to what the 45 refers to. It may be that the figure is really 65 and stands for the Śaka year 1065 = 1142 A.D. Used in the way suggested by Mr. Narasimhiengar, it puts back the beginning of Vishṇuvardhana's actual reign farther than there is any warrant for, as his brother was certainly ruling in 1104. His conversion by the reformer Rāmānuja may well have taken place in 1098, before he actually came to the throne,² and while he was a viceroy at Tonnūr, at the foot of the sacred hill of Melukōṭe.

As regards the end of his reign, I have given it as 1141 A.D. on the authority of Cm 96. This inscription was not written to record the death of the king, but

¹ These references are to inscriptions in my *Epigraphia Carnatica*.

² See Bhandarkar's *Vaiṣṇavism, Śaivism, etc.*, p. 51.

mentions it incidentally. It is surmised that I was misled by the similarity of names and mistook the general Bitti-Deva for the king. That is not the case. And Hs 137 shows that this general was yet living in 1162. What Cm 96 tells us is that in the Śaka year 1063, year Durmati (no more data), when the senior king (*hiriy-arasa*) Bitti-Deva ended his life (*kālam geyye*) at Bankāpura, and the body was being conveyed by Boppa-Deva-dannāyaka (to the family burial-place at Sosevūr—understood), the procession was attacked by some hostile band at Mudugere (which is near to Sosevūr). In the fight which took place, Binna-Gaṇḍa (no doubt one of the guards in command of the escort) was killed in saving the elephant and treasury. All the leading men (*prabhu-gaṇḍagaḷu*) of the nine *mandes*¹ of the Talige-nāḍ Thousand, to which he belonged, in consequence united in a petition to Nārasinga-Deva for a grant of land for the fallen man's son, and erected this memorial stone for Binna-Gaṇḍa.

The senior king was Bitti-Deva, as explicitly stated. He having died, petition was as a matter of course made to Nārasimha (or Nārasinga)-Deva, his son, as his successor now come to the throne. Nothing could be more circumstantial as to the king's death. Any inscriptions professing to give a later date for Bitti-Deva Vishnuvardhana must therefore refer to Nārasimha. As the latter was born in 1133 (Bl 124), he was only about 8 years old. It is not surprising, therefore, that the government should be continued in the name of his father, whose death may have been sudden and not generally made known. But we have inscriptions of Nārasimha dated in 1142, 1143, 1145, 1147 and onwards. In Cn 228 he is expressly called Vishnuvardhana-Nārasimha-Deva, and in this sense must be understood

¹ The *mande* of this Malnād region corresponds with the *mand* of the Todas of the Nilgiris and the *mandu* of Coorg.

inscriptions later than his father's death. It must also be noted that the stereotyped formula—*rājyam geyyuttam ire*—for the ruling king was often loosely used without regard to its strict meaning. Among others, examples of this may be seen in Ak 57 and Hk 121. So in Hn 130 Vishṇuvardhana is said to be ruling, but Nārasimha makes the grant, the meaning being that the previous matters related belong to the reign of Vishṇuvardhana. And what can be plainer than the statement in Ng 76 of 1145? First praising Vishṇuvardhana at length, and mentioning the provinces he ruled, it goes on to say—*ā mahānubhāvanim baliya tandeyal achch-ottida teradin . . . Nārasimhan arasu-geyyutt irddam*, "After that magnanimous one, as if stamped with the impress of his father, Nārasimha was reigning as king."

Though, under the influence of Rāmānuja, Bitti-Deva exchanged his Jain religion for that of Viṣṇu, and with the perfervour of a new convert founded Viṣṇu temples in several important places in his dominions and made extensive grants of land on both banks of the Kāvēri to Rāmānuja, who is said to have demolished 720 Jain temples and used the material for embanking the big tank at Dorasamudra, yet there is no trace of bigotry on the part of the king in his domestic affairs. His first queen was Śāntala-Devi, who was a strenuous Jain, as was her mother. But her father was a Śaiva, and she herself died in 1131 at the Śaiva holy place Śivaganga. An eldest son Kumāra-Ballāja and his eldest younger sister Hariyabbarasi or Hariyāla-Devi are mentioned in 1129, but the former must have died, as he does not appear anywhere again. By Lakkumā or Lakshmi-Devi the king had the son Nārasimha who succeeded him, born in 1133 and crowned from the day of his birth. This happy event, together with a victory won on the same day, the king ascribed to the favour of Pārśvanātha of the Jains. In 1134 he married a Pallava princess named

Bammala-Devi, and she was the *paṭṭa-mahādevi* or crowned chief queen down to 1141, during which time Rājala-Devi, a princess of Chālukya connexion, was the *piriy-arasi*. In 1136 he married another Śāntala-Devi, who bore a lovely daughter, Chikka-Śāntale, but they both died the same year, and Śiva temples were erected to their memory by the mother of the family. With Bammala-Devi may have come into the Hoysala kingdom a special Śaiva influence. As regards other parts of Mysore, evidence has lately been found that the Bhōganandīśvara temple at Nandi, at the foot of Nandidroog, was erected before 806 by Ratnāvali or Māṇikabbe, queen of Bāṇa-Vidyādhara, one of the line of Mahābali kings who claim to have made Śiva their doorkeeper. A *maṭha* also existed in connexion with the Yōganandīśvara temple at the summit of the hill, and the Kālāmukha sect of Śiva *yogis* were recognized in that part in the eighth century. Then farther north, in 943, under the Nolambas, who were Pallavas, Chilluka represents himself as a reincarnation of Lakulīśa, a great Śaiva teacher of the first century. Under the Chālukyas, in 1035, there was, in the Shimoga country, a Kālāmukha monastery at Baḷligāve, the capital of the Banavāsi province, where a Lakulīśa had his abode. But it was in 1136 that we find the Kālāmukhas settled at Dorasamudra (Halebid), and in the same century they appear at Arsikere and other places around.

L. RICE.

SIR J. H. MARSHALL'S KHAROSTHI INSCRIPTION FROM TAXILA

A few further remarks may be allowed concerning this interesting discovery; but they shall be brief.

1. *Ayasa*. This reading is fully confirmed by the photograph. It is satisfactory to note that the proposed reading *viyasa* has been withdrawn (by its author, Dr. J. F.

Fleet, *supra*, p. 316); for, though it might have been possible to argue that the facsimile does not absolutely exclude it, the form did not seem to be dialectically reconcilable with the rest of the inscription.

Dr. Fleet now (p. 317) adopts the explanation of *ayasa* as genitive of *ayam*, which I had previously (1914, p. 989) suggested as a possibility, referring to a passage in Pischel's *Prakrit Grammar*, which I also cited (*loc. cit.*). While this may be acceptable as a last resort, I am still unprepared to rely upon it, and prefer rather to find an error on the part of the workman who copied the record, whose carelessness has been already noted (*supra*, p. 156).

The use of the genitive has been made the subject of some observations, both in regard to the word *ayasa* here and in regard to cases elsewhere, especially the *maharayasa mahantasa* of the Taxila plate. The true doctrine concerning the genitive, that it signifies "in the reign of" the king in question, was clearly laid down by M. Senart (*Journal Asiatique*, VIII, xv, pp. 127-8); it was accepted by Bühler (*Epigraphia Indica*, iv, p. 56), and it has not to my knowledge been seriously impugned. It is analogous to the genitive on coins, and may be explained as due either to ellipse of "in the reign", or, as I myself should rather hold, as a genitive absolute, the predicate being "king", whether expressed or understood. Hence I see no reason to follow Dr. Fleet in taking it in the case of the Taxila plate as dependent upon the word "month" (p. 315).

2. *Khuṣanasa*. Baron von Stael-Holstein is probably prevented at the present time from considering this new evidence (JRAS., 1914, pp. 990-1), which definitely proves that the composers of Indian inscriptions regard the racial or family designation as *Kuṣana* and not *Kuṣa*, and from considering also M. Lévi's note upon the occurrence of both forms in the Chinese translations of the *Abhidharma-mahāvibhāṣā-śāstra* (JRAS., 1914, pp. 1019-20). Probably

he would admit, what to me has never seemed doubtful, that the *Khuṣāṇasa* of the coins is also a genitive singular, but would still hold that the evidence which he has adduced suffices to prove that the real name was *Guṣa*, and that this is represented by the Chinese form *Yue-chi*, *Kwei-shān* being later, and due to importation from India. To what I have previously (pp. 990-1) urged to this effect I should like to add that the simplest explanation of all is that the genitive plural of the original dialect, *Guxāṇa*, "of the *Guṣas*," was mistaken in the first instance by Indians *only* for a nominative singular and accordingly declined. Thus India's acquaintance with this race begins with a sort of Hobson-Jobsonism. This explanation deserves consideration, and it has met with the approval of several eminent scholars.

3. Sir J. H. Marshall's observations (JRAS., 1914, p. 983, and *supra*, pp. 195-6) remind me of the fact that in Wilson's *Ariana Antiqua* also (pp. 73-4 and 101-2) correspondences are noted by Masson between different styles of building observed in topes and the coins found in the topes. We may add the fact that tope No. 13 of Hidda, as it contained the Hidda inscription of the year 28 (*supra*, pp. 91-6), will belong to the style prevalent under the Kaniṣka dynasty.

It would accordingly be possible for Sir J. H. Marshall to compare his results at Taxila (perhaps he has done so already) with the plates contained in *Ariana Antiqua*, and so to ascertain whether there are any interesting correspondences.

F. W. THOMAS.

MALAYA-GANA-STHITI

Dr. J. F. Fleet in his last note upon this expression (*supra*, pp. 138-40) again upholds the view that the word *gaṇa* is here used in the sense of "tribe". He

does not, however, adduce any passage from Sanskrit writing where this meaning is either authorized or appropriate. The sole evidence supplied is the occurrence of the meaning "tribe" in the list of quasi-synonymical renderings given in Monier-Williams' Dictionary: such a citation will have no weight with any scholar of Sanskrit. The exact meanings of the word are carefully set out in the St. Petersburg Lexicon and the native Indian vocabularies, and the idea of tribe is not included among them.

It is plain, however, that Dr. Fleet himself does not rely upon the precise meaning "tribe", as inherent in the word itself, but considers that the established general sense of "collection", "group", etc., may in certain contexts have that import. But the idea of "tribe" is a special one, and it is a complex political conception, which in Latin is represented by *gens*, *natio*, and *tribus*, in Greek by *φύλον* and *φυλή*, and with similar particularity in other languages. The Sankrit employs the word *jāti*, and the fact that in the expression *Mālava-gaṇa* a different word is used indicates that a different conception is to be conveyed. We should not in English substitute "the group of Judah" for the "tribe of Judah", as a mere linguistic variant, more especially in an official record.

Dr. Fleet might "maintain" (p. 139) that in connexion with names of peoples such as *Mālava* and *Yaudheya* the best rendering of the word is "tribe": and, if anything like proof were intended, appeal might be made to the facts of the case. But the facts of the case are what is principally in question; hence we must rely upon evidence from some other side. Now precisely the evidence required has been supplied by Mr. Jayaswal in the paper to which I have referred, evidence for the use of the word *gaṇa* in a definite political sense, a sense appropriate to the present case, which he renders by "republic", but which may better be represented by "governing body" or "senate";

and this is accordingly the only sense which has a title to consideration here.¹

It will be observed that Dr. Fleet speaks (p. 139) of "the ordinary general sense" of the word "tribe", and seems to think any further discriminations pedantic. But the facts of history, both in India and elsewhere, lend a substantial importance to the distinctions² between (1) a tribe as a nation supposed to be united by blood, (2) a tribe as a part of a nation, whether (a) as a ruling caste, or a subordinate caste, living among an alien stock, or (b) as a subdivision of a nation presumed to be racially homogeneous. The *Mālava* and *Yaudheya* "tribes" may have been assignable to either (1) or (2). But I do not think that in either case the word *gana* would have denoted anything but the governing body of the "tribe".³

F. W. THOMAS.

¹ Let me add the following quotation from the *Sukranīti*, iv, 4, 29-30:—

राजा ये विदिताः सम्यक् कुलश्रेणिगणादयः ।
साहसलेयवर्जानि कुर्युः कार्याणि ते नृणाम् ॥
विचार्य श्रेणिभिः कार्यं कुलैर्यत्र विचारितम् ।
गणैश्च श्रेण्यविज्ञातं गणाज्ञातं नियुक्तकैः ॥

² "What families, corporations, and *ganas* are well known to the king, these should deal with people's affairs, excepting cases of violence and theft. The corporations should consider an affair which has not been considered by the families; the *ganas* that not decided by the corporations; the officials that not determined by the *ganas*."

³ For these and other distinctions see the Oxford English Dictionary.

⁴ Dr. Fleet is under the impression (p. 138 and note) that in a former note (1914, p. 1010) I misrepresented his connexion with this matter. But it will be seen upon inspection that both in the reference to his adherence to his "original interpretation of it twenty-five years ago" (his own phrase) and also in the statement regarding the "substance" of his "original" rendering I intended to confine attention to the meaning of the word *gana*, in regard to which the references seem to hold good. Previously (1913, p. 413) I had carefully stated the difference of Dr. Fleet's two successive views.

NOTICES OF BOOKS

1. YOGA EN OVERSIGT OVER DEN SYSTEMATISKE YOGA-FILOSOFI, paa grundlag af kilderne af POUL TUXEN. pp. [vii], 215. Copenhagen, 1911.
2. THE YOGA-SYSTEM OF PATAÑJALI, or the Ancient Hindu Doctrine of Concentration of Mind, embracing the mnemonic rules, called Yoga-sūtras, of Patañjali, and the comment, called Yoga-bhāṣhya, attributed to Veda-vyāsa, and the explanation, called Tāttva-vaigārādī, of Vāchaspati-miśra. Translated from the original Sanskrit by JAMES HAUGHTON WOODS, Professor of Philosophy in Harvard University. The Harvard Oriental Series, edited by CHARLES ROCKWELL LANMAN. Vol. xvii. Cambridge, Massachusetts, 1914.

Neither of these works, both dealing with the *Yoga*-doctrine as one of the six schools of Indian philosophy, can rely appreciably upon the attraction of novelty. On the one hand, the *Yoga*-system has been expounded by a succession of competent scholars, ending with Garbe and Deussen; and, on the other, the texts and chief commentaries have been more than once edited and translated. The ground covered by the work of Professor Woods is also that covered by the translation of Rāma Prasāda in *The Sacred Books of the Hindus*, which supplies in addition the text of the *Sūtras* and the *Bhāṣya*, and it is also partly covered by that of Gangānātha Jhā, published at Bombay in 1907. Professor Woods, however, very possibly undertook his task, which has occupied a long period, before the publication of Rāma Prasāda's work in 1910.

It is, therefore, to the perfection of the two works that we must look for the justification of their existence. Dr. Tuxen's treatise, approved as a degree thesis under the auspices of Professor Dines Andersen, is marked by a high degree of care and thoroughness. Some twenty pages are devoted to the history and texts of the school, after which we embark upon a detailed examination of its tenets, first on the theoretical side (pp. 25-133) and then on the practical (pp. 137-206). In both parts Dr. Tuxen's method, which gives to the book its chief value, is the same: he expounds the doctrines as far as possible in the language of the authorities, giving at the foot of the page frequent extracts from the Sanskrit originals. We thus obtain a view of the system from the inside, as if we were reading the actual texts; whereby we gain a good part of the advantage of a translation. This is especially useful in the practical section, where the precise import and concatenation of the several technical ideas are brought very clearly, and by means of great patience in exposition, home to the reader. And there are many enlightening observations in detail.

The most interesting chapter is that which deals with the characteristic feature of the *Yoga*-doctrine, namely its theism. This doctrine, so conspicuously wanting in the Sāṅkhya and in the closely allied Buddhist and Jaina systems, has but little support in the older Brahmanical literature. We are tempted to suppose that it arose at a more or less definite period, and won for itself a place in different sects at about the same time. In the *Yoga*-system it is so obviously an excrescence that a difficulty has always been found in explaining its presence. The doctrine of the school is here very clearly expounded by Dr. Tuxen. As a soul, God is not different from other souls; but He has the characteristic of being eternally free from *kleśas* ("evil"). Unlike the liberated souls, which have no further contact with the world, He

is everlastingly in connexion therewith, but only with the *sattva* ("goodness" and "intelligence") aspect of it, a view which is evidently of importance with regard to ethics. In two ways He serves the purpose of the yogins, first as the highest object of meditation leading to *mokṣa*, and secondly by way of removing hindrances from their path. He is also required as the source of the *Veda*, the inspiration of which is formally acknowledged, but not very adequately justified, by the Sāṅkhya.

The chapter on Praxis has also various points of interest, but it is chiefly in detail. We may reflect that for Indians also what is known as "religious experience" was an actuality, and this would naturally take formal shape by preference in the *Yoga*-system. The examination of the import of terms is here, as we have stated, very carefully carried out; and Dr. Tuxen has established a right to be regarded as a capable scholar in the field of Sanskrit philosophy—further evidence may be seen in his subsequently published translation of the *Tarkabhāṣā* (Danish Academy, Copenhagen, 1914)—and his work is valuable as a thorough, and perhaps the most detailed, exposition of the *Yoga* views.

Professor Woods' translation of the *Yoga-sūtras*, with two commentaries, appears under very enviable editorial conditions. No need to dwell upon the knowledge, care, and judgment so generously brought by Professor Lanman to bear upon the works which have the good fortune to appear under his editorship in the *Harvard Oriental Series*. But in this volume he has, in conjunction with Professor Woods, surpassed himself. Rarely can any book have appeared with so many excellences as such. The case was one calling for a special effort. A translation of a *Sūtra* treatise with commentaries and super-commentaries, containing several strata of citation and reference and requiring constant insertion of explanatory additions, offers abundant scope for the printer's art. It

will be admitted that in this volume the problem has been thoroughly mastered. By the aid of various discriminations and divisions of type, and other devices, which, though numerous, are never confusing, the reader is enabled to see at every point precisely where he stands, and the general impression is one of admirable clearness.

Professor Woods brings to the work the special qualifications of a recognized exponent of philosophy. It represents the labour of a number of years, commencing with a study of the *Sūtras* under Professor Deussen, and including a visit to native and other authorities in India ; and among the names of those to whom acknowledgments are made we find those of Professor Venis, Colonel Jacob, and Professor Jacobi. The numerous and apposite annotations and the list of works referred to are evidence of the care spent upon the task. The citations are as far as possible traced to their sources, and everything has been supplied in the way of conspectus, abstracts, and indexes, the last-named including a complete Sanskrit word-index to the *Sūtras*. The introduction discusses the identity of the supposed author of the *Sūtras*, Patañjali, and the evidence for dating the two commentaries. Arguments are adduced against the current Indian identification of the *Sūtrakāra* with the author of the *Mahābhāṣya*.

It is, no doubt, primarily as a translation that the book calls for judgment. Professor Woods speaks with diffidence of his venture in rendering into English texts and commentaries which have not been thoroughly tackled by European or American scholars ; and he is fully entitled to consideration on that account. We should not, however, understand him to disparage the two meritorious works of competent Indian scholars to which we have already referred. But, no doubt, the task of the European translator has its distinctive features. He must pay more attention to the grammatical structure of his text ; and he

must further display extra care in making the import of technical terms clearly appreciable by the reader. From this point of view we may see that Professor Woods' version has great merits; it is no doubt the best translation for reading in connexion with the Sanskrit texts. The sentences are sometimes broken up for convenience in rendering and to avoid cumbrous phraseology. But otherwise the translation is distinguished by scrupulous literalness. The sequence of thought is carefully marked, as also the precise meaning of connecting words, and ellipses are more than liberally supplied by bracketed additions. In spite of this, and by benefit of Professor Woods' philosophical competence, we have nowhere the impression of a merely philological rendering, which the stiff Sanskrit style may sometimes allow without any fundamental grasp of the meaning.

There is one feature of Sanskrit commentaries upon philosophical works which is apt to prove a trap for the unwary; and this is their habit of mixing merely grammatical exegesis with exposition of the argument. Here a native Indian scholar used to their ways enjoys a perceptible advantage; the European is in danger of seeing more meaning than is actually intended. In general Professor Woods has been equal to the occasion. But sometimes he seems to have been misled. Thus in the commentary on Sūtra ii, 9 we have the words—

स चायमभिनिवेशः क्लेशः स्वरसवाही . . . मरणदुःखमनुमापयति ।

which is rendered

“And this is that well-known hindrance [called] the will-to-live. This [fear of death], inconceivable . . .”

But *kleśa* is a mere parenthetical interpretation of *abhiniveśa*, and the translation should run—

“And this attachment-to-live, i.e. vicious propensity, inconceivable, etc., etc.”

Here both Indian translators are more exact. Occasionally the commentator's terminology is imperfectly rendered, as when *aniṣṭa*, "an undesired conclusion," is represented by "prohibited" (ii, 13) and *āgantuka*, "extrinsic," "adventitious," by "accidental". The *Bhāṣya* on ii, 10 is rendered

"These five hindrances when they have become like burned seeds, after the mind which has predominated over the deeds of the yogin is resolved [into primary matter], come with it to rest".

But clearly we should read

"These five hindrances, like burned seeds, when the yogin's mind, its business accomplished [*caritādhikāre*], is resolved [into primary matter], come with it to rest".

Here the translation of Rāma Prasāda "having fulfilled the purpose of its existence" is correct; while Professor Gaṅgānātha Jhā is unsatisfactory, giving merely "the active mind of the yogi". Again, in the supercommentary on iv, 33, the sentence

न हि पण्डितरूपाणामनेकजन्मपरम्पराभ्यामपरिश्रमसाध्या विवे-
कख्यातिप्रतिष्ठा

should hardly be

"For even learned men are not grounded in discriminative discernment, although it is to be acquired by the toils of study in a succession of many births".

but, as Rāma Prasāda has it,

"Even in the case of learned men who have been practising and learning for more lives than one to achieve discriminative knowledge, this knowledge does not become well-established,"

or rather "this knowledge is not an assured certainty" (*pratiṣṭhā*).

We might note some further cases of an analogous character. For instance, in n. 2 on p. 93

"There is a doubt as to there being a relation of cause and effect in things which are in different places" should be

"He entertains a doubt on the ground that (*iti*) there is no relation of cause and effect between things . . ."; and on p. 347 (*ad* iv, 33)

"There is no destruction of the round-of-rebirth. For living creatures are endless [in number], because they are countless" (similarly Rāma Prasāda) does not correctly represent the two ablatives. We should read

"There is no destruction of the round-of-rebirth, since it is endless in consequence of the numberlessness of living beings".

On p. 34 (i, 13) *tatra* should be rather "of these" than [permanence] "in this"; and p. 212 (iii, 13) the phrase *etena vyākhyātāḥ*, "hereby are expounded," appears as "thus have been explained" (in i, 44 a similar phrase is correctly rendered). On p. 26 (i, 9) the translations "perceptions or words" (so too Rāma Prasāda) for *śabda-jñāna*, "word-consciousness," and "something-said" or "something-that-is-thought" for *vyavahāra*, "convention," vitiate the sense, as does that of "species" for *jāti*, "birth," on p. 307, and "the human race" for *manuṣyajāti* (p. 344), "birth as human being."

In one or two cases we must go so far as to find a grammatical or lexicographical misapprehension, as when on p. 9 (*ad* i, 2) *āśaya-paripanthī* is translated in a wrong concord, or on p. 118 (*ad* ii, 9) *nirākaroti* is rendered "refers to", or on p. 178 (ii, 30) *aparigraha*, "abstinence from possessions," receives the meaning of *apratigraha*, "abstinence from acceptance of gifts."

Professor Woods' rendering of technical terms is characterized by a determined effort to find for them real equivalents and not merely translations. This is all to the good. The difficulty of the matter is stated in the Introduction; and accordingly it is not surprising that in

a number of cases we are unable to approve of what Professor Woods has chosen. To begin with *avidyā* itself, the rendering "undifferentiated - consciousness" seems hardly to do justice to the fact that in Indian philosophies in general it is a definite "error", usually a failure to realize the truth as taught by the school, which is the root-cause of existence; and it will be seen upon inspection how little the idea of "undifferentiated-consciousness" suffices for the understanding of ii, 5 and the commentaries. Again, "correlation" is too vague an idea to represent *saṃyoga* (ii, 23-5), which usually has the more precise meaning of "conjunction", "collocation". *Samāpatti* also (i, 41, etc.) is rather ambiguously rendered by "balanced-state": we should agree with Dr. Tuxen (p. 167) in understanding it as the identification of the thought with the object of thought, which indeed is probably what Professor Woods intends. As regards *ṛtti*, which Professor Woods, following Dr. Tuxen, translates by "fluctuation", we demur only on the ground that *ṛtti* is a modification, or mode, regarded statically, while "fluctuation" seems to describe rather the actual transition. Even in the case of *vikalpa*, where the main idea is well given by "predicate-relation", we should prefer as the actual rendering "predication" or "notion" or "opinion".¹

Such points of disagreement or criticism might, no doubt, be further dwelt upon. The texts translated are by no means easy ones, and a faultless rendering of such a text, or indeed of any Sanskrit writing, is an ideal which has never been realized. In general the reader will recognize in the book a faithful and determined effort to represent with great precision the real meaning of the *sūtras* and their commentators, and will be grateful to Professor Woods for devoting his labour and his special qualifications to the subject.

F. W. THOMAS.

¹ *Vikalpa* ("imagination," Rāma Prasāda; "fancy," Gaṅgānātha Jhā) is thought formally admitting affirmation and denial, i.e. non-intuitive thought, according to the Sākhya of merely conventional value.

HISTORY OF RELIGIONS. Vol. I: China, Japan, Egypt, Babylonia, Assyria, India, Persia, Greece, Rome. By GEORGE FOOT MOORE. New York, 1913.

To give an account in some 600 pages of the religions of nine of the most important of the countries of the ancient world is an undertaking of the most formidable character. The necessary condensation imposes on the author a burden of responsibility which is made the more onerous by the fact that no one man can attempt to be an authority on all these varied fields of study, and that he is therefore compelled to come to decisions on evidence which he cannot weigh with full control. Despite these difficulties Professor Moore's work achieves real and substantial success, and must be pronounced to be the best summary of the great religious systems which has yet been produced. It is based on careful study of the best authorities; it is framed on a plan which allots due importance to the social conditions of the peoples among whom the religions arose and to the development of theology in its philosophical aspect; it is distinguished by sanity and sobriety of judgment and by a sure instinct for the really important elements in the several systems.

The success achieved is in large measure due to the strict objectivity of Professor Moore's manner and to the laying aside of all discussion of origins, the space thus saved being devoted to the far more important problem of the development of the conception of God and His relation to man. It is indeed fascinating to theorize regarding origins and to reconstruct in the manner of *The Golden Bough* primitive thought, but in doing so we admittedly go beyond the limits of knowledge and can but frame hypotheses which we cannot hope to prove; whereas when dealing with the growth of Indian or Greek theology it is both possible and desirable to appreciate with some degree of reality the actual religious

outlook of the time. Hence the corn spirit *eo nomine* appears not at all, and totemism comes up for review merely in the case of Egypt,¹ where it is decided that there is no real proof of totemism as the explanation of animal worship there. We may no doubt deduce that in the case of India, Greece, and Rome alike Professor Moore is not convinced of totemism as an explanation of myth or ritual, especially as he mentions both the Avatars² and the bear dance of the little girls at Brauron³ without hinting at totemism in either case. The same soundness of judgment may be seen in the treatment⁴ of "abstract" deities: "the power that works harmony among citizens is for the antique apprehension no more abstract than the power that works the germination of grain on the earth," and the author therefore has no hesitation in recognizing readily functional deities, and in realizing that the growth of the great gods of Egypt, of Greece, or of India was in large measure a process of usurping the place of old functional deities. Excellent also is the recognition⁵ of the interaction of magic and religion, and the clear distinction drawn between these two sides of the sacrifice in Vedic India.⁶ Attention may also be called to the clear distinction which is properly drawn⁷ between the giving of food to the dead, even if conjoined with fear of their wrath if neglected, and offerings to the dead for securing their protection and prosperity, which alone are in the proper sense religions.

One merit of the book is doubtless directly due to its being the work of one hand: the author, having realized the similarity between concepts in widely different religions, avoids the temptation to seek the origin of one concept from another. Thus, on the often mooted question⁸ of the relation of Neo-Platonism in the shape

¹ p. 148.² pp. 329 seq., 336.³ p. 417.⁴ p. 558.⁵ pp. 221, 222.⁶ pp. 264, 265.⁷ p. 110.⁸ pp. 534 seqq.

given to it by Plotinus, he points out the facts, that neither Clement nor Origen nor Porphyry had any substantial information on the subject of the views of the Brahmins or the Buddhists, that the often quoted visit of Plotinus to the East ended in Mesopotamia, and that there is no proof that either before or after that visit he had any substantial information regarding Indian philosophy. He also points out that, as has best been shown in the late Dr. Caird's *The Evolution of Theology in the Greek Philosophers*, the theories of Plotinus are essentially the necessary outcome of the earlier philosophy of Greece, which by its failure to connect the idea of God organically with the world led to the removal of God from any real contact with finite existence, and paved the way for the effort to explain the relationship by the mediation of Nous and the world spirit, for which there are no real parallels in Indian philosophy. So, again, Professor Moore does not even hint at the possibility of the borrowing of transmigration by Pythagoras from India, despite the array of authority in favour of that opinion. Similarly,¹ he does not accept the borrowing of the Iranian Anahita from a Semitic source, though admitting that this deity may have assumed characteristics of the kindred deities of West Asia.

Another question of importance discussed by the author is the rise of the Kṛṣṇa cult.² Following Professor Garbe and Sir G. Grierson, and ultimately Sir R. Bhandarkar, whom he does not name, Professor Moore is inclined to accept the view of a primitive man named Kṛṣṇa, who was at the one time a great warrior (as in the *Mahābhārata*), but also a great teacher who taught the adoration of God as the Bhagavant, "blessed." After the death of this hero-teacher he was deified, and in due course identified by the Brahmins with Viṣṇu, thus being adopted into the orthodox belief. On this view the

¹ pp. 373, 374.

² pp. 330 seqq.

Bhagavadgītā is to be understood as suggested by Garbe, the interpolations are to be discarded, and a pure monotheism is to be found in it.

This theory is, of course, attractive and satisfactory to the æsthetic sense. But it is right to remember that it rests upon a mass of unproved hypothesis, and hypothesis which is not very likely to stand much examination. The *Bhagavadgītā* does not as it stands represent monotheism at all, and the process of extracting that monotheism has been examined with care and destructive effect by Professor Hopkins, to whose criticism no effective, if indeed any,¹ reply has yet been made by the supporters of the theory, who show a wise reluctance to meet his detailed criticisms. More recently the theory has been rejected by Professor Deussen, and the position really stands thus. If there were ever a *Bhagavadgītā* of the type believed in by Garbe it is not to be recovered from our text, which affords no justification for the conclusion that such a text ever existed. Thus we are left with only one other piece of evidence as to Kṛṣṇa as a teacher: in the *Chāndogya Upaniṣad* (iii, 17. 6) we hear of a pupil, Kṛṣṇa Devakīputra, of Ghora Āṅgīrasa, who is credited with certain doctrines. We are asked to believe that this is an historical reference to the Kṛṣṇa of the epic. It is a much more credible hypothesis on the theory of identity of the Kṛṣṇas that we have in this Kṛṣṇa a euhemerism, a reduction to human rank of a tribal god, and it is the only hypothesis which does not raise serious difficulties as to the date of the divinity of Kṛṣṇa and his appearance in the epic. That text never treats Kṛṣṇa as a mere ordinary mortal teacher; when he teaches he reveals himself as the supreme being,

¹ Garbe, in his *Indien und das Christentum*, pp. 228 seqq., where a reply should certainly have been made, contents itself with quoting the approval of Sir G. Grierson and Professor Winternitz. But arguments should be answered by arguments, not by authority.

and we cannot ignore the fact that his divine nature is clearly known throughout the epic, which in a part claimed as old by Garbe¹ (ii, 2291) calls him *gopījana-vallabha*, revealing him already as the beloved of the Gopīs, a feature which sits oddly on a presumed warrior-teacher, but which accords well with a god of Kṛṣṇa's type, closely connected with pastoral life. Moreover, it is impossible to ignore the fact that in the epic Kṛṣṇa appears in his actions and his practical advice in a very different aspect from the Kṛṣṇa of the Upaniṣad, who appears in a passage where, among other virtues, the telling of truth is inculcated (iii, 17. 4). If, therefore, Kṛṣṇa Devakīputra in the Upaniṣad is an euhemerism, his character is improved in the new light in which he is placed as a human being. It is, however, of course possible that the similarity of name is a mere accident²: metonymics are very frequent in the Vāṁśas of the Upaniṣads, and Kṛṣṇa is not rarely found as a non-divine name; the only point of doubt in this view is the rarity of Devakī, but this is not conclusive; Professor Garbe³ himself resigns his former view that the Patañjalis of the *Mahābhāṣya* and of the Yoga are identical. Nor can a third possibility be excluded: Kṛṣṇa as a god and a teacher may differ, but Devakīputra may be borrowed by the former from the latter, though this is less probable. We must, to be candid, recognize that our evidence is insufficient to decide the precise facts, and that we cannot build on it the edifice of the Kṛṣṇa who founded the Bhāgavata sect as a mere man. The epic

¹ *Indien und das Christentum*, p. 227. Professor Garbe (p. 211, n. 1) is wrong in seeing inconsistency in Hopkins' *Religions of India*, pp. 465, 467-8, and that book appeared in 1896, not 1898.

² This is the view of Max Müller, SBE. i, 52, n. 1, based on the fact that no effort is made in the Brahmanical literature to connect the two Kṛṣṇas.

³ Op. cit. p. 249, n. 1. There is no doubt of the correctness of Jacobi's later dating (JAOS. xxxi, 24 seq.), and Professor Moore's reference (p. 322) should be read subject to this.

has a god, the Upaniṣad a man, and the means of connexion are not apparent./

Professor Moore has also let himself be attracted by Professor Garbe into the belief that the Upaniṣads represent largely a Kṣatriya philosophy. It is certainly not the case that the Upaniṣads represent the wisdom set out in them as being that of the Kṣatriyas as a general principle, and it is remarkably curious that the chief Kṣatriya thinker, the Buddha, turned away in dissatisfaction from all attempts to solve the riddle of being and devoted himself to less theoretic aims. This fact appears to reveal far more correctly than the theory of Garbe the real Kṣatriya attitude towards questions of metaphysics, and with all their defects it cannot really be denied that the main purpose of the Upaniṣads of the old and genuine type is an explanation of reality, not merely or mainly salvation, which is dwelt upon only in their later portions.

In the case of Buddhism Professor Moore seems to accept the view that the Buddha was merely in his own opinion and in that of his immediate followers a simple man teaching a moral discipline. The difficulty of this view is that it seems to ignore distinct traces visible even in the Pāli Suttas of the Buddha's own consciousness of more than mortal nature, and the remarkable tales of the *Mahāparinibbāna*. These traits point clearly to the feeling of the Buddha that he was not a mere mortal and associate him with later religious teachers in India itself who advanced claims to a quasi-divinity. Moreover, Professor Moore elsewhere¹ reminds us that the claim of a man to a certain divinity was less astonishing than it appears now to us, at a time when the concept of deity differed from ours.

Professor Moore adheres² to the view that Jainism developed its tenets independently of Buddhism. This

¹ p. 572.

² pp. 280 seqq.

is now, thanks to Professor Jacobi, the accepted doctrine, but it is difficult not to share the doubts of Barth as to the value of the Jaina tradition of the teachings of the school. It must be remembered that we have no early evidence for that teaching in detail. The date of the Jain canon is most uncertain: the oldest texts were liable to interpolation, and as their language proves were freely interpolated down to the time of Devarddhigani in the fifth century A.D.; and the current view that they go back as far as 300 B.C. rests on no evidence. It is at least probable, not of course that Jainism is a later growth from Buddhism, but that the doctrines of Jainism as we have them were deeply affected by the doctrines of Buddhism.

Special attention is given throughout the work to eschatology, and this emphasis fully justifies itself in the explanation of the popular religions of India and the mystery cults of Greece. The fact that Aristotle had no eschatology, since the active reason, though eternal, is not individual, is duly brought out,¹ but perhaps this defect in the master is the cause of the somewhat too brief exposition of his theology, which is in some ways the highest point reached by Greek thought. Special praise is due to the treatment of religion under the Empire, and of the part played by the Mithras worshippers.

The only substantial defect of the work is the index: prepared, as it has clearly been, with some care, it is still often defective. On the other hand, the bibliography is excellent and well adapted for its purpose.

Advice in regard to questions of Chinese, Zoroastrian, and Indian religion is acknowledged as received from Mr. E. B. Drew and Professors A. V. Williams Jackson and Charles R. Lanman.

A. BERRIEDALE KEITH.

¹ p. 509.

ANNUAL REPORT OF THE ARCHÆOLOGICAL DEPARTMENT
FOR THE YEAR 1913-14. (Archæological Survey of
Mysore.) By R. NARASIMHACHAR. Fol. Mysore,
1914.

In this volume, the latest of Mr. Narasimhachar's valuable reports on the antiquities of Mysore, the place of honour is held by the temple of Kēśava at Somanathapur, a fine specimen of the Chālukyan school of architecture built in 1268, of which the front view is well depicted in the first plate. It contains numerous sculptured figures of deities, many of them signed by the artists, representing the best work of the Hoysala period, which are also illustrated here. Several other buildings have been inspected, notably the beautiful temple at Nandi, an extremely fine specimen of the Dravidian type, which was built about the end of the eighth century, and is described by Mr. Narasimhachar and illustrated in considerable detail. Several inscriptions are published. The first is a grant purporting to be from the Gaṅga king Mādhava I, the genuineness of which Mr. Narasimhachar very properly suspects; in our opinion he might justifiably have gone further and condemned it unreservedly. In addition to the Gaṅga inscriptions, he publishes a grant of the Rāshtrakūṭa Gōvinda III, and gives notices of a number of other documents of interest. The discovery of several rare Sanskrit and Kanarese works is announced; and readers will be glad to learn that "the work in connection with the General Index to the volumes of the *Epigraphia Carnatica* has made fair progress during the year".

L. D. B.

FOLKLORE NOTES. Vol. I: Gujarāt. By A. M. T.
JACKSON and R. E. ESTHOVEN. pp. ix and 159.
Bombay, 1914.

These notes are compiled from materials collected in Gujarāt by the late Mr. A. M. T. Jackson, I.C.S. (who

was murdered in Nāsik in 1909), by Mr. R. E. Enthoven, I.C.S., and have already been published in the *Indian Antiquary*. They are now brought out in a form which will render them accessible not only to Orientalists but to students of folklore throughout the world. The collection of materials of this sort owes much to Mr. W. Crooke, and the present collection consists, in fact, of replies to the "Questions on Folklore" which were circulated by him in India, a useful and practical series of questions grouped under easily understood headings. This may be compared with the more searching and elaborated series of questions contained in the Questionary framed by Miss Burne and her collaborators in the new edition of the *Handbook of Folklore* (App. B). Mr. Crooke's questions are especially suited for Indian conditions and have been successful in evolving much important information, and his own work on the *Popular Religion and Folklore of Northern India* is a guide to the manner in which such information can be utilized.

It is inevitable in such collections, that many of the details should be trivial or unimportant, yet rejection is invidious, and it is best to include as much as possible and leave the task of sifting the mass to future investigators. Every such body of information carefully recorded is certain to comprise much that is valuable, and this is certainly the case here. For instance, in chapter i under "Sacred Lakes" we find that bathing in Lake Mānsarovar turned a woman into a man (pp. 39, 42). Another piece of water has the power of restoring her milk to a mother who cannot suckle her child, if she washes her bodice in it. Others conceal the mystic underworld beneath their waters, like the *Tír nan og* of Irish legend; Dwārka, where Krishna still sits in his golden palace, may yet be found under the waves of the Indian Ocean off the coast of Gujarāt, and Rāvan continues to reign in his golden Lañkā beneath the waters.

The widely-spread practice of giving opprobrious or contemptuous names to children to avert the evil eye or to scare away evil spirits is well illustrated in chapter vi, where a very full list of such names is given. Uko (dunghill) and Dendo (the croaking of a frog) are remarkable examples (p. 123). The lists of names given in chapter viii are also worthy of consideration as possibly affording evidence of a former totemistic system which now no longer exists. Similar names occur among the Balôch clans. Much of the information belongs to the common stock of Hinduism and is influenced by literary sources; but with this are everywhere found local observances of purely popular origin. For instance, the so-called "mad" trees, which are subjects of worship (pp. 137, 138), are evidently of such a nature, although much of the tree and serpent worship is more general, and often derived from religious books.

This volume is to be followed by another dealing with the folklore of the Kōnkan, which will be looked for with interest by folklorists and Orientalists alike.

M. LONGWORTH DAMES.

VANGA SAHITYA PARICHAYA OR TYPICAL SELECTIONS
FROM OLD BENGALI LITERATURE. By DINESH
CHANDRA SEN. 2 vols. Published by the University
of Calcutta, 1914.

These two portly volumes of some 2,100 pages are an anthology of Bengali poetry and prose from the eighth to the nineteenth century, and are ancillary to the same author's *History of Bengali Language and Literature*, which was reviewed by Mr. Beveridge in this Journal for 1912, p. 279. In that History the author traced the development of Bengali literature during those centuries, and illustrated it with English translations of extracts from the compositions of the principal poets and writers,

quoting occasionally portions of the Bengali poetry. Here he presents copious selections from those compositions.

Old songs and poetry had always been dear to the people of Bengal, and collections of them were made by individuals for their own pleasure even in the fifteenth century, but the Vaiṣṇavas in the seventeenth century developed that method and compiled real anthologies, among which the most important is the *Padakalpataru*, compiled in the first part of the eighteenth century and containing 3,001 songs. The advent of English literature pushed the old poetry into the background; yet connoisseurs remained who cherished the old songs, and the press of Baṭṭalā in Calcutta by publishing much still preserved eager readers among the people.

In 1872 the songs of Vidyāpati and Caṇḍidās were published and revived the taste for the old poetry. Old MSS. were sought for, and, when it came to light that many MSS. existed in village homes all over the country and especially in East Bengal, some enthusiasts made diligent and systematic search. The difficulties were great, because inquirers had to encounter the doubts, suspicions, and even fears of illiterate owners. Nevertheless the efforts were successful and large collections of MSS. were secured by the Asiatic Society of Bengal, the Sāhitya Pariṣat of Calcutta and Babu Nagendra Nāth Basu. Multitudes, however, yet await discovery, and any son of Bengal, who would wish to do his motherland good service, can find a field of usefulness and distinction in saving them before they perish through fires, vermin, and even the ignorance of their possessors.

When those collections were made, the question naturally arose how they could be rendered available for enjoyment and study; and the Vice-Chancellor of the Calcutta University, who was consulted, decided that the best preliminary measure would be to make and publish typical selections. The University then entrusted that

duty to Babu Dinesh Chandra Sen, and this work is the outcome of his researches. There can be no question that Dinesh Babu was the person most competent to undertake that task, and in these two volumes we have without doubt a good presentment of typical specimens of old Bengali literature. The style of the book is excellent, its printing is fine, and it is embellished with well-executed reproductions in colour of some old paintings. It has also a copious index.

The book deals with the whole of Bengali literature, using the term Bengali widely so as to include much of Behar, and no doubt in early times the distinction was less clear. It does not view or treat the literature chronologically, but is divided into sections, each of which deals with a particular branch or subject and contains all the selected pieces relating thereto. Still, the arrangement is chronological to this extent, that the subjects are taken up according to their appearance in time, and the literature in each section is arranged according to date. The professed scope of the book is a survey of the old literature, yet the compiler has carried his selections down to the middle of the nineteenth century, that is, practically to the present time. This is a matter for regret, because the space occupied by recent productions, which can be easily purchased, might have been utilized better by a larger selection from the earliest matter. Hence it is quite true, as he says, that the work is inadequate for a critical study of the old literature from an historical, philological, or literary point of view. As an anthology of Bengali literature ancient and modern it appears to be excellent, and it may stimulate curiosity and interest and draw workers into the field of old Bengali literature; but it only merits in part the title of old literature.

It is hardly profitable, therefore, to attempt to notice any critical questions, because the earliest specimens of

the literature are the most important material to elucidate them, and there is not enough to draw general conclusions from safely. There is material enough for the discussion of questions of metre, and perhaps of grammatical forms, and Dinesh Babu in the Introduction notices some of them, with reference to views propounded by Sir G. Grierson and Mr. J. D. Anderson, but acknowledges that they require more study than has yet been given to them. In dealing with all such questions it must be remembered that the people of Bengal are of mixed origin, combining strains no doubt from the countries all around, so that Mr. Anderson very rightly says, as Dinesh Babu notices (p. 87), "in investigating we ought not to neglect the languages on the Bengal border."

There is in Bengal a vast quantity of vernacular words which are not to be found in the dictionaries, as any one who has made a collection of them knows. Such words are invaluable for philological purposes, and a careful compilation and study of them may reveal with what languages they are connected. The early specimens of poetry in this book supply a considerable number of them, and Dinesh Babu has given a glossary of peculiar words, besides explaining them in the notes. Such words still exist, as two examples will show: চলা, *chalā*, occurs meaning "wood for fuel" (p. 170, note ⁴), and is still used as meaning "wood, timber", in the Dacca district; again, লড়, *lar*, "running" (p. 182, note ²), is still in use in the Tippera district.¹ One suggestion may be offered with regard to case terminations, whether old Bengali did not sometimes combine the terminations of two cases: thus I have heard a peasant in Bakarganj say *bahin-er-at*, "at a sister's (house)"; and perhaps the word *gharetthā*, "from the house" (p. 160, note ⁹), may be *ghar-et-thā*, "from in the house."

¹ The transliteration is ordinary.

The work is a good anthology, but it is to be regretted that the compiler did not adhere to the professed scope of the work, namely, "Typical Selections from Old Bengali Literature," shut the nineteenth century out of it altogether, and devote the space that would have been saved to more of the earliest literature.

F. E. PARGITER.

THE ANGUTTARA NIKAYA OF THE SUTTA PITAKA EKA
DUKA AND TIKĀ NIPĀTA. Translated from the
Pali text published by the London Pali Text Society
in 1885 by EDMUND ROWLAND JAYETILLEKA
GOONARATNE. Galle, Ceylon: printed at the
Lankaloka Press, 1913.

Students of the Tripitaka will welcome the first part of the Anguttara Nikāya translated into English by the veteran Buddhist scholar, editor of Pali texts, and benefactor to Pali studies, the Mudaliyar E. K. J. Goonaratne. It is just forty years since the first four nipātas of this collection were edited by the late Dr. R. Morris for the Pali Text Society, at that time in the fourth year of its existence. The translator points out that "not one of the sacred texts had up to 1880 been throughout translated into English". This grievous blank no longer remains as a reproach to us; indeed, many of the translations that have done great service to Pali studies were published before some of us who are now Palists came into the field, a good while ago. But the work is not nearly finished, even in the canonical texts. The appearance of part of the Anguttara Nikāya in a full and literal translation (neither "free" nor "abridged", we are thankful to see) is a means for readers not versed in Pali to observe for themselves those very marked characteristics of this text which distinguish it, as

a composition, from another Nikāya lately translated by a master-hand, namely the Dīgha. It is easy to understand that one great community of Buddhists of the Pāli tradition may and does show a strong preference for the Dīgha, in canonical studies, and another community a preference for the Anguttara. Such preferences, we are told, have become traditional with the Burmese and the Ceylonese. Those who have the best opportunity of being familiar with Pāli literary production in the past and the general trend of study in Burma and Ceylon tell us how assiduously the Burmese have devoted themselves to the Abhidhamma as a whole, and, in their Sutta studies, have exalted the Dīgha, with its long yet closely knit expositions of doctrine, as by far the most important collection of Suttas. With this may be compared the attention given in Ceylon to the Anguttara, a body of teaching in which by the curious classification which gives the Nikāya its name, eleven sections treat of innumerable matters: conduct, character, men, women, this world, and the other worlds, besides the Doctrine.

Great students of the Rule—the Vinaya—as the Ceylonese community of monks have been from early times, they have here a precious hoard of documents on which to draw for their second traditional function, namely the directing of the thought and life of the laity, which must look to them for teaching and guidance.

The portion of the Anguttara now before us in translation (Eka-, Duka-, and Tika-nīpātas) is not yet as familiar as the Jātaka, Dhammapada, and Gāthās are to the English-reading student—perhaps partly because the task of translating the Anguttara is difficult to those who wish to place the sacred Buddhist texts before the general reader. It must be read commentary in hand. And, as the commentator himself needs some explaining occasionally, footnotes must be multiplied. This, however, helps to initiate the student, and Mr. Goonaratne's readers will

wish he had given even more footnotes with Pali terms and discussion.

A considerable strain is added for a translator of the *Anguttara* by the presence of verses, or rather metrical proverbs, sayings, and little sermons, scattered about in the prose of the text. As they are not poetry, they had better (from the present writer's point of view) not be put into any sort of verse or pseudo-verse form in English. We have in the volume before us some ineffectual blank verse, a rendering that hardly flatters the extremely prosy slokas of the original. Yet in studying this translation no reader can fail to share the pleasure with which Mr. Goonaratne has performed his task. How congenial it has been we can read in his long and sympathetic preface. Here he pays tribute to all those who have preceded him in work on the *Anguttara Nikāya* as editors or translators, homage to the late R. C. Childers, Professor Oldenberg, Mrs. Rhys Davids, and principally to Professor Rhys Davids, as translators of sacred texts. Mr. Goonaratne's thanks to his own Ceylonese teachers and collaborators remind us how ardently Buddhist and religious is the spirit that has inspired his own work.

As to certain details a few objections may be made perhaps, without carping unfairly. Careful as is the translation, and abundant as is the translator's English vocabulary, the rendering before us does not soften but rather intensifies the prosaic and technical effect of innumerable Buddhist words and phrases, particularly for those to whom Buddhist thought is not a familiar field. We do not presume to say that the translation here is literally faulty, but the associations that cling to words in our mother tongue are so obstinate that we feel occasional discomfort in reading such translations as this excellent piece of work. Sometimes the terse construction of Pali (e.g. preferring the abstract noun to a verbal clause) is followed faithfully, with most unfortunate

results. For example, on p. 70, "two virtues, viz. :— the dissatisfaction at the accumulation of meritorious acts and non-degradation from continued exertion." Other examples may be found. On p. 12 the force of "*ye dhammā akusalā akusalabhāgiyā akusālapakkhikā [sabbe te manopubbangamā]*" is not well rendered by the weak, ambiguous phrase "[the mind is the forerunner of all evil actions] all evil actions associate with the mind". p. 208 (A, iii, 63, 6): the translation "large, exclusive, unlimited, friendly sympathy", looks like a slip of the pen or a misprint. Such errors occur here and there, e.g. "properly" for "improperly" on p. 9 (A, i, v, 1), where the misprint spoils the sense completely. p. 15 : *bhojjāṅga* for *bojjāṅga* should not have been overlooked. A few other small details might be mentioned, but to insist further on these while giving a welcome to the first volume (and hoping for the remaining Nipātas from the same pen) would be only a small, ungracious formality of criticism.

M. H. B.

[P.S.—After the above review was written the Report of the Pali Text Society reached the present writer, who thus heard of the death of Mr. Goonaratne. These last lines can therefore only be an expression of respect and regret, instead of hope that other work shall ever again reach us from this pious and generous scholar. It is touching to read in his own words that "interest in the study of the Pali language and literature commenced at a late period (1882) of my life". Being appointed by Professor Rhys Davids Secretary in Ceylon of the Pali Text Society, Mr. Goonaratne was drawn to edit some Text-books and Pali works. From then to his last year of life he was diligent in the work that was alike a duty and a joy to him.—M. H. B.]

COORG INSCRIPTIONS (revised edition): *Epigraphia Carnatica*, vol. 1. By B. LEWIS RICE, C.I.E., Member of the Royal Asiatic Society, etc., etc. Super-royal 4to: pp. 114, with twelve Plates and a Map. Madras: printed by the Superintendent, Government Press: 1914.

The inscriptional records of Mysore, as published in and between 1886 and 1905 in the twelve volumes of the *Epigraphia Carnatica* series, would stand a great amount of improved treatment in the way of the critical re-editing and the appraisalment and application of them.¹ It is understood that the rough and ready style in which they have been laid before us is due partly to a desire to make a complete epigraphic survey of the State, and collect and publish all the materials, as quickly as could be done: and allowances have always been made accordingly. But the result is a tantalizing one: our attention has been drawn to many fairly early records of an interesting kind; but we have remained unable

¹ A few of the available illustrations of this are as follows:—

1. The Brahmagiri, Siddâpura, and Jattiânga-Râmêśvara edicts of Aśoka, vol. 11, Chitaldroog, Mk, 21, 14, 34: contrast the treatment of these records by Professor Bühler in *Epigraphia Indica*, vol. 3, p. 134.

2. The Śravaṇa-Belgola epitaph of Malliśheṇa, vol. 2, Śravaṇa-Belgola, SB, 54: contrast the treatment of this by Professor Hultzsch in *Epi. Ind.*, vol. 3, p. 184.

3. The Kaḍaba copper-plate record of Gōvinda III, vol. 12, Tunkūr, Gb, 61: contrast the treatment by Professor Lüders in *Epi. Ind.*, vol. 4, p. 332.

4. The Kaḍagere copper-plate record of Vijaya-Siva-Māndhātṛi-varman, vol. 7, Shimoga, Sk, 29, and the Bannaballi or Halebid copper-plate record of Kṛishṇavarman II, vol. 5, Hassan, Bl, 121: contrast the treatment of these by Professor Kielhorn in *Epi. Ind.*, vol. 6, pp. 12, 16.

5. The Belatūru inscription of Rājêndradêva, vol. 4, Mysore, Hg, 18: contrast the treatment by the Rev. F. Kittel in *Epi. Ind.*, vol. 6, p. 213.

6. The Śravaṇa-Belgola inscription of Irugapa, vol. 2, SB, 82: contrast the treatment by Professor Lüders in *Epi. Ind.*, vol. 8, p. 15.

7. The Tālgund inscription of Kākusthavarman, vol. 7, Shimoga, Sk, 176: contrast the treatment by Professor Kielhorn in *Epi. Ind.*, vol. 8, p. 24.

to use them with any confidence even in respect of general features, and still less as regards details, except in the few cases in which illustrations were given with the texts and translations, or in which it has been practicable to obtain an ink-impression or a photograph of a particular record and get it edited properly by some practised hand.¹

In these circumstances it was hoped that we should be able to welcome the present volume—a “revised edition,” prepared under the sanction of the Government of India,² of a smaller book, containing only twenty-three records, which was issued in 1886—as inaugurating a new departure towards giving us what is so much wanted for Mysore.³ It is with great regret that we find ourselves unable to do so.

The book has, indeed, four useful features. In the first place, it brings together all the seventy-five inscriptions which are known, so far, as coming from the Province of Coorg, and gives facsimile illustrations of the twelve most important of them: and though the earliest of the series, No. 2, only dates from A.D. 888, and only twenty come from before A.D. 1200, while just as many date from even after A.D. 1700, still people interested specially in Coorg may find plenty of matter in these epigraphs to reward their perusal of them.

Secondly, the illustrations are all good and reliable ones. For this, except in the case of Plate 1, the ink-impressions for which were made and supplied by the writer of this notice, we are indebted to Mr. H. Krishna

¹ Compare the preceding note: other instances, perhaps as many as twenty, might be cited; but that is all.

² This is stated in the preface: and the book, in addition to being vol. I of the *Epigraphia Carnatica* series of Mysore, is also marked as vol. 39 of the New Imperial Series of the Archaeological Survey of India.

³ Coorg is a British Province: but the Chief Commissioner who administers it is the Political Resident of Mysore: hence the inclusion of the inscriptions of Coorg in the volumes of the Mysore series.

Sastri, Assistant Archaeological Superintendent for Epigraphy, Southern Circle, who was deputed to help by doing this part of the work.

Thirdly, the book has an introduction of twenty-seven pages, which sums up the historical details of these records and explains the connections of them, and is probably sound enough except (for a reason which will be mentioned below) in its treatment of the earlier part of the history.

Lastly, a table placed among the "preliminaries" gives a key to the seventy-one abbreviations, An, Ag, Ak, Bg, Bn, Bl, and so on to Yl, which, with numbers attached to them, the archaeologists of Mysore use by way of referring to the contents of the various volumes of the series, and which (except in the cases of Cg, which covers everything in vol. 1, and SB, which marks anything in vol. 2) are so bewildering to other people who have not the same intimate knowledge of the subdivisions of the Mysore State.¹

But in other respects the book does not at all come up to our hopes.

In the first place, we find that the editor still claims that the record on the Mercara or Merkāra plates, No. 1,

¹ This table, which is indispensable towards enabling us to follow the published disquisitions, still remains to be made fully useful at a glance by rearranging the entries in the exact alphabetical order of the abbreviations themselves, instead of that of the full names of the taluqs which they represent. Also, the titles and dates of issue of the twelve volumes, which should always be given along with it, would have been given better here, below this table, rather than in the separate list on p. 102.

To make it really easy to turn to the texts and translations of the records, the numbers of the volumes should be quoted along with the abbreviated references, as, for instance, "2, SB, 54", "5, Bl, 121", "7, Sk, 176". Further, in any revised edition of vols. 3 to 12 the taluqs (after that one which has the same name with the district which gives the title of the volume) should be rearranged in alphabetical order. As matters stand, it is hard to think of any references more difficult to turn up than those to the contents of the volumes of this series.

Plate 1, is a genuine record dating from A.D. 466, and uses it (along with various other productions of the same kind) as a basis towards making out an early history and chronology of the Gaṅga princes of Mysore, which are purely fictitious and misleading.¹ The alphabet, language, general style, and spelling of this record in every detail mark it as a forgery, of the tenth century or perhaps even later, which was concocted to set up a claim to a certain village on behalf of a Jain temple, and which is worthless for any historical purposes. However, allowance may perhaps be made even for this feature of the book. We pass on to another aspect of it.

The systematic editing of the Indian inscriptions is no new thing: it has been going on for very many years, with a result that a certain technical method became established long ago, and has been adopted by all who have a real interest in the work and aim at a critical and useful publication of such materials; which method includes prefacing each text with a short introduction, telling us certain things that we want to know about the nature and surroundings of the record and commenting on certain details in it.² The present volume, however,

¹ See disquisitions in the introductions of other volumes of the series (especially vol. 9, Bangalore), of which only an outline is given on p. 3 ff. of the introduction to the present book. For some of the other forgeries so used, see the present writer's List of Spurious Indian Records in *Ind. Ant.*, 1901, p. 214, Nos. 10, 11, 46, 48, 50 to 52, and 54 to 59. Others are to be found in volumes of the *Epigraphia Carnatica* and Annual Reports published after the date of that list.

Along with the spurious records, much use has been made of some inscriptions of the eleventh and twelfth centuries which present matter of a purely fabulous nature relating to early times: see remarks by the present writer in *JRAS*, 1905, p. 295 ff. Also of certain imaginative chronicles, one of which was composed as late as the nineteenth century: regarding the most notorious of these, the *Koṅṇadēśarājakkal*, see some remarks in *Epi. Ind.*, vol. 3, p. 170.

² For an illustration of this method see any volume of the *Epigraphia Indica*, in particular from vol. 3 onwards.

follows the style of its original and of the other volumes of the series to which it belongs, and pays no attention to up-to-date requirements. There are no remarks on the characters, language, vocabulary, and orthography of the records; no concise abstracts of the purport and objects of them; and no fixing of the English equivalents of the detailed dates given in some of them. The translations, instead of being placed each immediately after the text to which it belongs, have all been put away inconveniently in a separate part of the book. There is no use of thick type in the texts and translations to give prominence to the names of persons and places and the dates. And even the primary and most essential rule of arranging the texts in lines, numbered, to match those of the originals,¹ and of marking in the translations the line in which each new paragraph begins, has been disregarded; with the result that the book thus fails to give any of the facilities of reference to the details of the records which are so necessary in any quotations or discussions of them.

It is believed that revised editions of some of the other epigraphic records of the Mysore State are contemplated. If this is the case, it is earnestly hoped that the Mysore Government or the Director General of Archaeology, whichever has the control of the matter, will make such arrangements as will ensure that the results shall be really useful ones: the chief desiderata are, the arrangement of the texts in roman characters in the manner mentioned above, and a good supply of reliable facsimiles of such of the records as are not later than A.D. 1000.

J. F. FLEET.

¹ This remark applies to the texts in roman characters, which are the important ones. The omission is the more extraordinary because (1) the lines have been duly marked in the Plates, which, however, is of no practical use unless the texts are arranged to match; (2) they actually are shown in the texts in Kanarese characters (p. 73 ff.), which, however, are of no use for purposes of reference.

SUMERIAN RECORDS FROM DREHEM. By WILLIAM M. NESBIT, Ph.D., Semitic Fellow in Drew Theological Seminary. New York, Columbia University Press; London, Humphrey Milford, Amen Corner, E.C., 1914.

This little book has xiv and 59 pages of letterpress, a "sign-list and glossary" (pp. 60-70), and autographed copies of thirty tablets and three seal-impressions (ten plates). The texts are of the usual kind, namely, temple-accounts, with details of the offerings made, etc.

A very concise conspectus of the grammatical material of the author's little collection is given, as well as an interesting and very full list of the technical terms used therein. It is a pity, however, that he has not adopted the usual method of transcription in certain cases. In Columbia University *cu* will probably be correctly pronounced as *çu*, because the students will have learned the system adopted, but here, and in most other countries of the world, if the four lines on p. xiv be overlooked, it will be incorrectly pronounced *ku*. The same may also be said for *x*, which in England is pronounced *ks*, and not *kh* (*h*). It is gratifying to note, however, that the author does not transcribe *j* for *i* (*y*) before a vowel.

The following (No. xx) is one of the more interesting of these inscriptions:—

(1) *Mina udu še* (2) *a-du gi-kam* (3) *gi udu še a-du mina-kam* (4) *gi udu še a-du-eša-kam* (5) *gi² gu-za d. Būr-d. Sin* (6) *Sur-d. Ba-u-mu rim* (Rev. 1) *iti á ú-lala-gi-ba-ni* (2) *ki Su-ba-gu-ta* (3) *ba-zi* (4) *gir Ad-da-kal-la dup-sara* (5) *Iti uru-da-ku* (6) *mu en d. Nanna(r)-kar-zi-da ba-tug*. (Edge) *Lama udu*.

(1) 2 grain(-fed) sheep (2) the first time; (3) 1 grain (-fed) sheep the second time; (4) 1 grain(-fed) sheep the third time, (5) (for) the throne of (the deified) Būr-Sin. (6) Sur-Bau-mu (was) the bringer (Rev. 1) (on) the 10th day of the month less 1—(2) from Su-baga (3) they were

received. (4) Certifier: Adda-kalla the scribe. (5) Month Uruda-ku, (6) year (the king) invested the high-priest of Nannar-kar-zida.

In a paper upon the deification of kings and ancestor-worship,¹ I have published several tablets from Jokha tending to show that the thrones of the Babylonian deified kings were in the temple of the god of Jokha, and that the offerings were made to them because they were regarded as being imbued with the spirit of the divine being who had been accustomed to sit thereon.

Sur-Bau was a son of Bûr-Sin, and the official here mentioned was apparently named after him, "My Sur-Bau"—*Sur-Bau-mu*. Such names as this are by no means rare.

Tablet No. iv refers to deliveries of wood—*gis-eme gar*, "tongue-wood, trimmed," as the author translates the first item. The consignments came from Adamdun, supposed to lie near the Elamite border.

Another interesting inscription (No. xxii) has the unusual word *unāka* (see *The Berens Tablets*, pp. 96-7):—

(1) *Aš lama še gur* (2) *ā ma hun-ga* (3) *sag da-na-ta* (4) *d. Dun-gi-ḥen-gala ki-šu* (5) *Šabra u-a* (Rev. 1) *u-na-a-ka-ta*.

(2) *Mu Si-ma-lum ki ba-ḥula*.

(1) 1 *gur* 240 *qa* of grain, (2) the wage of the shipwright(s) (3) of the chief of the yard (?), (4) at the city Dungi-ḥengala, (5 and rev. 1) from the senior seer (his) lord.

2. Year (the king) ravaged Simālum.

Ku-mal = *ḥunga* is the usual group for "workman", and preceded by *ma* apparently means "shipwright". The *ki* at the end of l. 4 seems to stamp Dungi-ḥengala as being the name of a place.

Though I differ from the author in some of his renderings, it is a very praiseworthy little book, and

¹ See p. 461.

instructive in more ways than one. We may look for good work from Dr. Nesbit.

T. G. PINCHES.

CHINESE CLAY FIGURES. Part I: PROLEGOMENA ON THE HISTORY OF DEFENSIVE ARMOR. By BERTHOLD LAUFER, Associate Curator of Asiatic Ethnology in the Field Museum of Natural History, Chicago. 1914.

Dr. Laufer has the pen of a ready writer, the equipment of a trained scholar, and the keenness of the scientific explorer. He has already made his mark in the field of Far Eastern history, art, and civilization, and seems destined to cut it deeper still there, though it should be borne in mind that sinologic topics form only a part of his professional studies, a fact which his growing competency in Chinese matters rather tends to obscure.

Before giving some account of this work there is one small bleat of discontent I am impelled to utter concerning the title. It is long, and so far as this part of the book goes it would more closely describe Dr. Laufer's treatment if it ran in some such terms as *Early Armour*, illustrated by Chinese clay figures and other plates. For other readers should be interested in these chapters besides those who devote themselves to the forbidding fruits of sinology.

The present part of the work consists of a volume of 315 pages, in seven chapters, followed by sixty-four plates, by no means all of which illustrate clay figures. There are also fifty-five text-figures. The plan of the whole cannot be better described than by its opening paragraph:—

"An extensive collection of ancient clay figures gathered in the provinces of Shen-si and Honan during the period from 1908 to 1910 is the basis of the present investigation. As the character of this material gives rise to research of manifold kinds, it has been thought advisable to publish it in two

separate parts. Many of the clay statuettes which form the nucleus of our study are characterized by the wear of defensive armor, hence this first part is devoted to an inquiry into the history of defensive armor,—a task of great interest, and one which heretofore has not been attempted. It will be recognized that this subject sheds new light on the ancient culture of China and her relations to other culture zones of Asia. The second part of this publication will deal in detail with the history of clay figures, the practice of interring them, the religious significance underlying the various types, and the culture phase of the nation from which they have emanated."

This being the scheme, and the author being nothing if not thorough, we begin in chapter i, "History of the Rhinoceros," at the beginning, and at once find ourselves in an awkward place where no safety is, between Dr. Laufer on the one side, with a rhinoceros, or rather with two, *unicornis* and *sumatrensis*, and Professor Giles on the other, behind a vague but formidable "bovine animal". These three quadrupeds are claimants for the right to wear the Chinese names *ssū* and *hsi* (alias *se* and *si*), and therewith the honour of providing the ancient Chinese with the material of their first body armour, as described in the classical book, the *Chou Li*, or *Rites of Chou*. The chapter is very interesting and the longest of the seven, extending to no less than 173 pages. But just because it has raised a controversy it may unduly obscure the value of the remaining chapters, and I shall perhaps be of service to readers if I pass from it to an *aperçu* of the contents of those that follow.

Dr. Laufer's general view of Chinese civilization and its origins is summarized in chapter ii, "Defensive Armor of the Archaic Period," on p. 185. Speaking of the war-chariot, he says that like many other basic factors of ancient Chinese culture it is one of those acquisitions which ancient China has in common with Western Asia, and which go back to a remote prehistoric age. He

proceeds in this chapter to consider what the most archaic armour of the Chinese was. Basing himself on the statements of the *Rites of Chou*, he concludes that contemporary armour was marked by the absence of any metal, and consisted only of a cuirass and a helmet, both of rhinoceros hide. (He uses "cuirass", however, to include a corselet and a short skirt, as I understand him.) He argues that the crucial passage in the work just named has been misunderstood by all the Chinese commentators, and in their wake by the French scholar Biot in his translation, and that the text does not mean, as they supposed, that a suit of armour consisted of seven, or six, or five pieces sewed together by the edges, but of that number of superposed layers of rhinoceros hide, cut up into large and thin sheets, first cured, and afterwards tightly pressed and sewn together.

The archaic helmets (*chou*) were, he thinks, only round caps of the same hide, corresponding to the Roman *galea*. I may add, however, that if we may judge by one ancient example of the character for *chou* which has survived, the latter would seem to have resembled the German *pickelhaube*, for a pointed spike appears, springing from a spherical or thickened base. Dr. Laufer maintains that the use of rhinoceros hide persisted in Chinese armies down to the Tang period (A.D. 618-906), but not to the exclusion of metal, as the centuries passed. Naturally, no specimens of such hide armour have survived.

But the author thinks the archaic period knew also a scale-armour of hide, a type in which horizontal rows of scale-shaped leather pieces were fastened on a backing or foundation, also of hide. This type was known as *kiai* (*chieh* in Pekinese), a scale. Examples have been found in Japan, though not in China, but some of the curious clay figures illustrated in the plates, and representing Shamans, may be, as the author suggests, wearing such scale jackets, while brandishing spear and shield in their

exorcising dances. Among the Khalkha Mongols the late Captain Binstead, of whose recent death at the Front we have heard with deep regret, witnessed and described in the last October Number of this Journal the modern counterpart. In general, the chapter concludes, this archaic armour agrees closely with that of other primitive populations in Asia, as, for instance, the Scythians described by Strabo.

With chapter iii, "Defensive Armor of the Han Period," we pass to the introduction of metal armour into China, and the fact occasions an interesting and suggestive discussion of the reasons for the change. Metal suits, helmets, brassards, and neck-guards now appear, but Laufer points out that the documents discovered by Stein show that both the old type and the new hide reinforced with metal were in use in this period among the Turkestan garrisons. It is here argued that the first metal thus applied was copper, replacing the earlier leather scales, and gradually developing a type of uniform, oblong, rectangular "plate". Ultimately iron ousted copper armour, and was usual in the time of the T'ang dynasty. A corresponding change took place under the Han, from copper to cast iron, for *offensive* weapons also.

In a most interesting passage on p. 217 Dr. Laufer broaches a theory to account for these and other military developments in China. Briefly, it propounds the view that ancient Irān evolved far-reaching military reforms deeply affecting the entire ancient world, and, among others, the Turkish peoples of Central Asia and of Siberia. One of these reforms was the institution of a regular cavalry armed with metal-plated armour and with sword and shield—the *cataphracti* of Xenophon's day. This mode of fighting and these weapons were adopted, Laufer argues, by the Huns, the perpetual enemies and scourge of the Chinese, but by the time of the Han dynasty the latter had been wise enough, in

their turn, to imitate both the tactics and the equipment of their predatory neighbours.

Chapter iv, "History of Chain-mail and Ring-mail," illustrates the previous general thesis by an examination of the appearance of a special type (in the two varieties just mentioned) in China and other Eastern countries. The type was widely prevalent on the Volga and in Siberia, but observers agree that it was of foreign origin there, Persian in our author's view. He points out that the monuments show that both scale-armour and chain-mail were in use in the time of the Arsacides and their successors, the Sassanides. It was from Persia the author believes that both the Moghuls and the Arabs derived chain-mail.

Dr. Laufer obtained and illustrates two suits of such armour in China, one from Kansu and one from Shensi province, but cannot find that this type was ever in use by Chinese. But both chain-mail and the simpler scale-armour were worn by Tibetan soldiers, and as it is difficult to believe the latter country could have had the skill to produce chain suits, these must have been imported from the West, leaving the scale coat as an indigenous manufacture.

Chapter v is devoted to "The Problem of Plate Armor". By plate-armour, Dr. Laufer is careful to point out, is meant not that which consists of large surfaces of metal enveloping the front and back of the wearer (such suits he terms "sheet-armor"), but a defensive dress of horizontal rows of narrow, rectangular laminæ mutually lashed together, and each row similarly secured to the one above and below. This type, he insists, must be distinguished from scale-armour, for which a backing is indispensable, for in his opinion the two types are of independent origin.

Such plate-armour was worn in Japan, in North-West America, among the Eskimo, and by the curious tribe

known to the Chinese historians as the Su-shen in North-East Asia. In this region the material was of bone, and it was in use in the third century, apparently long before the Japanese made any armour at all, even of plain leather. The author thinks from the available evidence that bone plate-armour in North-East Asia was as old as, perhaps older than, any of iron in China or Korea. The Scythians used bone armour of this kind, some plates of which have been found in South Russia. Lastly it existed in Assyria, and in the Egypt of Rameses II. Dr. Laufer suspects that such a wide dissemination is due to fitness for use by a cavalry of *cataphraeti*. But when, where, and how the type first arose, and in what manner it spread to the widely separated regions in which it has been found, these are the unknown points which remain for the ambition of others to solve.

"Defensive Armor of the Tang Period" is the heading of chapter vi. In this period, besides the armours previously described, we find figures of guardian deities clad in sheet-armour. The type, Laufer says, originated in the Sivaitic worship of India, and became widely diffused over Tibet, Turkistan, China, and Japan. The figures given in plates 46-61, excavated in Honan and Shensi, are remarkable. Especially perhaps plate 49, which is called "The Triumphant God of Death", who is represented as a knight with complete armour and has a strangely Western and mediaeval appearance.

Chapter vii, on "Horse Armor and Clay Figures of Horses", concludes this part of the work. It is mainly a description of the clay figures of horses, with and without riders, recently dug up from graves in Shensi and Honan. The figures are on the whole only indifferent, but plates 64 and 67 show really well-modelled forms, especially the latter. Both are from Honan.

I suppose I ought to take a few exceptions on points

of detail in taking leave of this solid contribution to knowledge until part ii is published. The alligator is not extinct in the Yangtze River, as the author supposes, p. 156. I have seen a living specimen myself, and the species was fully described by the late M. A. Fauvel. On p. 187 the expression *kan ko* is translated "shield and spear", but the *ko*, as numerous examples prove, was a kind of halberd. On p. 208 the author refers to pl. xix as illustrating "a three-storied watch-tower rising from the bottom of a round bowl; on the two parapets and roofs the sentinels are engaged in showering from their cross-bows a volley of darts at an advancing column of scouts". This same model is illustrated by R. L. Hobson in his recently published *Chinese Pottery and Porcelain*, where, on p. 13, it is described as a "fowling-tower". On p. 209 the left-hand entry from the Shuo Wên dictionary is not that intended by the author, who meant to cite the word *yeh*, but has inadvertently inserted the Shuo Wên's previous entry *tsi*.

L. C. HOPKINS.

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- I. DAVIDSON. SAADIA'S POLEMIC AGAINST HIWI AL-BALKHI. A fragment edited from a Genizah MS. 8vo; 104 pp. with a facsimile. New York: The Jewish Theological Seminary of America, 1915.

Among the fragments found in the Genizah in Cairo Dr. Davidson was fortunate enough to discover one more of the lost works of Seadyah, the great scholar, philosopher, and polemical writer of the tenth century. The object of this newly discovered treatise was the refutation of the anti-Biblical theses of a certain Hiwi of Balkh. Up to now only scattered allusions to this writer had been found in various books. The nature of his objections had practically remained obscure. It was more a guess than real knowledge which led the Jewish scholars

at the end of the last century to the assumption, first that Hiwi was a Karaite, a view since given up after the investigations of Pinsker, then, a rationalistic interpreter of the Law. The real nature of his rationalism was not known, nor even the exact date when he lived. Even the name Balkh was read Kalb. It was surmised that this was an opprobrious surname, "Dog," given to him by his opponents. Now, however, the whole situation has been changed, owing to this discovery of Dr. Davidson; for little as Hiwi was known and his attack on the Bible, still less was the reply of Seadyah. Here everything was mere hypothesis, for it consisted of a few citations. A considerable portion, or at any rate about one-sixth of the original work of the latter, has now come to light. It contains answers to forty-seven questions raised by Hiwi, and it gives us a clear insight into the views entertained by Hiwi, who lived in the middle of the ninth century, and who seems to have propagated anti-Biblical teaching and to have had some influence among the schools in Babylon and Persia. We are getting an insight into the religious movements of those times which seem to have been very intense. Persia seems to have been a hotbed of all kinds of religious sectarian teaching. Manichæans, Zendists, or rather the religion of the Magian, jostled with Christianity, Judaism, Sabæism, and who knows how many Gnostic sects besides that flourished in that country. Hiwi then seemed to have been influenced by these various teachings. He reminds us strongly of Mani, who attempted to combine the various religions of the time, criticizing each one in turn and creating a new form of religious conception. Mardan Farukh's Pahlawi work contains also, as Dr. Davidson points out, similar polemical attacks against the records of the Bible in which we may recognize late echoes of the ancient anti-Jewish Gnostic sects and of Theophilus. Hiwi's work is more than mere scepticism. It is an attempt at negative

destructive criticism of the doctrines of the Bible. How far he succeeded in creating a real sect it is difficult to say. That he was not a Karaite is now proved beyond doubt, and he was attacked by Jews and Karaites, as shown by citations from writers belonging to both sects. It is more than a mere literary curiosity with which we are dealing. It is a phase in the historical development of Jewish sects, and joined with other traditions may help to explain the obscure beginnings of the Karaite movement on the one hand among the Jews, as well as similar movements among the inhabitants of ancient Persia and Babylon. The reply of Seadyah—a kind of polemical monograph—takes the form of a rhymed poem with alphabetical acrostics, into which are interwoven the acrostics of the name of the author, who very skilfully handles the language of the Bible and shows himself a master in the complex form of Hebrew poetry. It must remain an open question whether Hiwi wrote, as Dr. Davidson assumes, his criticism of the Bible in Hebrew, or, as I am inclined to believe, in that Aramaic which has been utilized for what is known as Pahlawi. Dr. Davidson has given now not only a first, but also an excellent critical edition of his unique find. He has accompanied the text with valuable notes, showing the Biblical origin of many of the phrases used by Seadyah in his mosaic. He has accompanied the text with an excellent English translation. He has added as an appendix all the references found to Hiwi in Jewish and Karaite literature, as well as the parallel passages from Mardan Farukh's work, and he has thrown light on the problem of Hiwi in a scholarly introduction.

Dr. Davidson is to be heartily congratulated on this book, which has been published as vol. v by the Jewish Theological Seminary of America.

M. GASTER.

THE MUSIC OF HINDOSTAN. By A. H. FOX STRANGWAYS. pp. x, 364. Oxford: at the Clarendon Press, 1914.

DIE INDISCHE MUSIK DER VEDISCHEN UND DER KLAS-
SISCHEN ZEIT. Nach den Platten des Phonogramm-
Archives der kais. Akademie. Von Dr. ERWIN FELBER.
pp. 188. Sitzungsberichte der Kais. Akad. der
Wissenschaften in Wien, Bd. clxx, Abb. vii. Wien,
1912.

The feature which first strikes the reader of Mr. Fox Strangways' book is its manysidedness. Its chief merit is due to the circumstance that the author has studied in India the facts for himself. There is throughout the book no trace of the smile of superiority, but a serious and sympathetic endeavour to interpret the meaning of Indian music on the basis of its own principles and ideals.

The first two chapters form a musical diary. This gives not only an account of the many cultivated singers and their songs, sought out by the author, but also a description of the folk-songs and occupation songs diligently collected. Even though they may be, as the author admits, too fragmentary in their present form to be useful, there is no doubt that he has shown the way which must be taken if we are to "get close down upon those natural instincts of song-makers", and "behind the conventions, of which all art is full, to the things themselves of which those conventions are the outcome".

The chief difficulty at present is to understand and interpret those conventions which form the theory of Indian music. This is the subject with which much of the book deals, and it is this aspect of which the treatment and results are the most tentative.

We need to understand the classical textbooks to which the Indian musician appeals, and it is certain that we cannot be content with accepting the traditional interpretations.

Herein lies the chief qualification to be made on Mr. Fox Strangways' work. He has not been able to approach the textbooks at first hand, and his authority is M. Grosset's translation of chapter xxviii of Bharata's *Nāṭyaśāstra*. It is also this circumstance which makes detailed criticism impossible. We can never get down to the concrete facts in dispute. Further, M. Grosset was influenced by Rajah S. M. Tagore, who again was influenced by writers still less authoritative.

The chapter on Vedic chanting suffers from a similar circumstance. The author here bases his discussion on the theories of European grammarians, apparently without being aware of the dangerous quicksands on which he is treading. The *svārīta* "is shown on philological grounds to have been originally between the two others in pitch". What the grounds are we are not told, but the definition of *svārīta* which follows is one which some philologists would strenuously dispute. And yet the author's own description of the *svārīta*, and his treatment of it in the chapter on Grace, is probably sound. It agrees, however, not with his authorities, but with the theory that the accent is a *süceigipflig* or a circumflex. How do we know that "the pitch accent became a mark of stress only after the beginning of our era"? Has not the accent of the *Rigveda* as recited always been pitch? And has the modern stress accent any relation to the recited accent?

But much of the discussion is independent of these debatable matters. Such an analysis and exposition of æsthetic values as we find in the chapters on Form and Melody will always be beyond the grammarian and philologist.

Dr. Felber's book is based on the transcription and translation of forty-six phonographic plates selected from a number made by Dr. F. Exner in India in 1904. At the time they were made the difficulty of reproducing

the text without noting it at the time was not realized, and hence some of the plates could not be utilized. They include ordinary recited verses, oratorical, and sung. The most interesting to the Sanskritist are the accentuated Vedic texts and their variant readings. Dr. Felber's introduction discusses speech, declamation, and song in their relation to the Rk, Yajus, and Sāman.

E. J. THOMAS.

NOTES OF THE QUARTER

(April-June, 1915)

I. GENERAL MEETINGS OF THE ROYAL ASIATIC SOCIETY

May 4, 1915.—Dr. Gaster, Vice-President, in the Chair.

The following were elected members of the Society :—

Pandit Jagannath Prasad Chaturvedy.

Mr. Kumud Lal Dey.

Pandit Mannan Drivedi.

Mr. Mohendra Kumar Ghosh.

Mr. Kumud Bandhu Das Gupta.

Khan Mohammed Hyat Khan.

Pandit Maya Shankar.

Mr. Atul Chandra Som.

Professor C. A. Storey.

Three nominations were approved for election at the next general meeting.

Professor Inayat Khan, accompanied by the Royal Musicians of Hindustan, gave a lecture on Indian Music.

ANNIVERSARY MEETING

The Anniversary Meeting was held on May 11, with Sir Charles Lyall, Vice-President, in the Chair.

The following were elected members of the Society :—

Babu Amalananda Bose.

Mr. G. S. R. Krishnaiya.

Mr. Sarat Chandra Mitra.

One nomination was approved for election at the next general meeting.

The Secretary then read the Report of the Council for 1914-15 as follows :—

REPORT OF THE COUNCIL FOR 1914-15

As a preliminary to this Report it may be observed that the Society's Financial Year ends on the 31st

December, and the Report is nominally for the year ending then: but the List of Members, with the variation in the number and details of them, is usually made out down to a later date, in this case the 9th February; and the Reports always deal with a few matters which occur down to the time of the Anniversary Meeting, such as the reconstitution of the Council for the ensuing year beginning after the General Meeting held in June, the Society's Publications, the awards of the annual and triennial Gold Medals, and so on.

2. The Report for the year 1914 is of a satisfactory character. There is an increase in membership of thirteen over the previous year, the number elected being seventy-one, against fifty-eight in 1913.

(a) By death there has been loss of ten members:—

Mr. S. Kuppuswami Aiyangar.	Mr. C. W. McMinn.
Mr. M. Sakhawat Ali.	Colonel S. B. Miles.
Mr. E. R. Ayrton.	Raja Naushad Ali Khan.
Mr. A. H. Baynes.	Hon. W. W. Rockhill.
Mr. E. Colston.	Mr. Jotindranath Samaddar.

In Mr. Baynes and Colonel Miles the Society has lost two valued members of long standing. The death of Mr. Rockhill is a loss to both diplomacy and scholarship.

(b) By resignation the Society loses:—

Professor T. W. Arnold.	Rev. J. A. Nairn.
Mr. Lovat Fraser.	Major W. F. O'Connor.
Mr. H. Harcourt.	Mr. J. E. O'Connor.
Rev. A. Kluht.	Mr. J. F. H. Parker.
Mr. J. M. Mitra.	Rev. G. E. Phillips.
Mr. R. Waddy Moss.	

(c) Two gentlemen who were elected as members, Mr. A. Caldecott and Mr. J. Coatman, have not taken up election.

(d) Under Rule 25 (d) the following nineteen cease to be members of the Society:—

Mr. Talib Masih Alexander.	Mr. Hibatollah Azimabadi.
Mr. Muhammad Asaf Ali.	Mr. Wali ul Huq.
Mr. Sarat Chandra Bhattacharya.	Mr. E. Klippel.
Mr. P. S. Ramulu Chetty.	Mr. Manmatha Nath Mukerjee.
Mr. Maung Ba Cho.	Mr. J. E. Nathan.
Mr. Pulinkrishna Dé.	Mr. P. Powar.
Rai Bahadur Priya Lal Ganguly.	Mrs. P. Powar.
Mr. Rajani Kanta Das Gupta.	Mr. H. S. S. Qadri.
Mr. N. H. Harding.	Mr. V. S. Sinha.
	Mr. Tan Tiang Yew.

(e) The seventy-one new ordinary members who have been elected are :—

Mr. S. M. Ameen.	Rai Bahadur Mati Lal Ganguli.
Mr. M. A. Azim.	Mr. Suprakash Ganguli.
Mr. M. Badaruddin.	Rev. J. K. Gunalankar
Mr. C. S. Balasundaramiyer.	Mahathera.
Mr. Jagan Nath Bhandari.	Mr. Sigmar Hillelson.
Captain G. C. Binsteed.	Professor Ganganatha Jha.
Lady Boyle.	Mr. A. S. Kent.
Dewan Bahadur Govindoss Chathoorbhoojadoss.	Dr. Ahmad Khan.
Rai Bahadur Charu Chandra Chaudhuri.	Mr. Ghulam Hyder Khan.
Babu Devakumar Ray Chaudhuri.	Mr. Mohammad Yamin Khan.
Babu Gopaldas Chaudhuri.	Shafaul Mulk Hakeem Abdur Rashid Khan.
Mr. Girindra Nath Chaudhury.	Mr. Maung Ba Ko.
Mr. N. G. Cholmely.	Babu Radha Krishna.
Mr. Sailendranath Comar.	Mr. Surendra Nath Kumar.
Rev. A. W. Davies.	Babu Bimala Charan Law.
Babu Haribhusan De.	Miss F. M. G. Lorimer.
Mr. Duncan Dunbar Dickson.	Captain D. L. R. Lorimer.
Miss M. Lowes Dickinson.	Miss M. Lumsden.
Sheikh Abdur Rahim Baksh Ellahi.	Mr. Anant Ram Madan.
Moulvi Syed Abul Fatah.	Pandit Todar Mall.
Dr. John C. Ferguson.	Mr. M. P. Hajee Abdul Azeez Maricar.
	Mme. Marielle.
	Rev. E. Osborn Martin.

Dr. C. O. Sylvester Mawson.	Mr. K. K. Smritibhushna Ray.
Rai Sahib Syama Behari Misra.	Mr. Moulvi Hafiz Abdur Razzaque.
Babu Surendranath Mitra.	Mr. Narain Sandhu.
Colonel W. J. W. Muir.	Pandit K. Bhaskara Sastri.
Mr. Haridas Mukerji.	Mr. Muhammad Shahidullah.
Mr. Frank Noyce.	Mr. H. S. Shuttleworth.
Mr. J. N. Wilfred Paul.	Mr. A. Srinivasachari.
Mr. Tajuddin Pir.	Mr. Karpur Srinivasarao.
Mr. Morgan Philips Price.	Dr. Hassan Suhrawardy.
Ven. Samana Punnanandi Swami.	Mr. Vattaseri Sri Velayudhan Tampi.
Mr. K. S. Sankara Ramaiah.	Pandit Lingesa Vidyabhusana.
Professor Herbert Niel Randle.	Moulvi Syed Abdul Wahid.
Mr. Ghulam Rasul.	Major P. L. E. Warming.
Professor H. G. Rawlinson.	Mr. H. E. C. Wintle.

3. The usual Statement of Accounts is appended. The Council recommend that a vote of thanks be passed to the Auditors, Mr. Crewdson, Mr. Sewell, and Mr. Waterhouse.

4. The accounts on the receipt side compare favourably with those of last year. Four of the new Non-Resident Members compounded for their subscription; and, as compositions are treated as capital, this has added nearly £90 to our funds: this amount has been paid into the Society's account at the Post Office, pending future investment. In addition to that, £200 were invested in New Zealand 4 per cent Stock; and the Council has, within the last month, invested a further £200 in South Australian 3½ per cent Inscribed Stock 1939.

5. On the payments side of the accounts there are three quite new and unprecedented additions. The first is a temporary increase in insurance, the Council having decided to insure the Library against all War risks at a charge of £25. The second additional item is also due to the War: the Assistant Secretary, Mr. Good, being a member of the Territorial Force, has been absent on service

since August, and the Council, while granting him full pay during his absence, found it necessary to appoint a substitute. The third new item was foreshadowed last year at the Anniversary Meeting, when it was announced that the restoration of the pictures in the Society's possession had been undertaken. During the year £31 5s. was expended, with a most satisfactory result; and approximately another £30 will be spent in completing the restoration. A Committee was appointed by the Council to collect all available information with regard to the Society's Art Possessions, and a list is in course of preparation. When completed, the catalogue will be printed, and will, it is hoped, prove of interest to members of the Society.

6. It may be noted that the donation of one hundred guineas towards the Pali Dictionary, given in ten annual instalments, is completed this year. This much-needed Dictionary, which is being compiled by several Pali Scholars under the editorship of Professor Rhys Davids, will be very welcome. We understand that some of the letters are ready for the Press.

7 (a). In the literary work of the Society the Journal naturally comes first. It has fully maintained its usual standard, both in interest and in size. Specially interesting articles were contributed by two of the younger members; namely, "The History and Evolution of the Dome in Persia" by Mr. Creswell, read before the General Meeting in April, and "Life in a Khalkha Steppe Lamasery" by Captain Binsteed, who, we regret to say, was killed in action early in April, having been previously mentioned in dispatches for distinguished service.

(b). During a short visit to London, Professor Sylvain Lévi found time to read to the Society in June a paper on "Central Asian Studies": this has been published in the October number. Other papers read before General

ABSTRACT OF RECEIPTS AND

RECEIPTS.

SUBSCRIPTIONS ...	£	s.	d.	2	1	0.
Resident Members—				961	1	0
72 at £3 3s. ...						
Advance Subscription—1 at £3 3s. ...	226	16	0			
Part Subscription—1 at £1 13s. ...	3	3	0			
	1	13	0			
Non-Resident Members—						
5 at £1 1s. ...	5	5	0			
388 at £1 10s. ...	581	0	0			
2 at £1 0s. ...	2	18	0			
Advance Subscriptions ...	30	0	0			
Arrears received ...	13	10	0			
Part Subscriptions ...	1	6	0			
Compounders ...	94	10	0			
	961	1	0			
RENTS RECEIVED ...						
GRANT FROM INDIA OFFICE ...				260	3	6
JOURNAL ACCOUNT ...				210	0	0
Subscriptions ...				352	9	5
Additional copies sold ...	279	2	1			
Sale of Pamphlets ...	55	12	6			
Advertisements ...	2	14	0			
Sale of Index ...	14	13	10			
	7	0				
	352	9	5			
DIVIDENDS ...						
New South Wales 4 per cent Stock ...	93	1	3			
Midland Railway 2½ per cent Debenture Stock ...	32	2	0			
South Australian Government 3½ per cent	4	19	9			
Inscribed Stock, 1939 ..						
New Zealand 4 per cent Consolidated Stock, 1927	21	16	3			
New Zealand 4 per cent Stock, 1943-53	11	10	11			
Local Loans Stock...	4	0	7			
Income Tax returned ...	13	12	8			
	4	19	1			
	93	1	3			
INTEREST ON DEPOSIT ACCOUNTS ...						
Lloyds Bank, Limited ...	19	12	4			
Post Office Savings Bank ...	14	7	7			
	5	4	9			
	19	12	4			
SUNDRY RECEIPTS ...						
				5	8	
Balance as at January 1, 1914 ...	1,896	13	2			
	724	19	7			
	£2,621	12	9			

FUND.

FUNDS.

£802 13s. 10d. New South Wales 4 per cent Stock.
 £212 8s. Midland Railway 2½ per cent Debenture Stock.
 £664 16s. 2d. South Australian Government 3½ per cent Inscribed Stock, 1939.
 £454 16s. 9d. 3 per cent Local Loans Stock.
 £297 7s. New Zealand Government 4 per cent Consolidated Stock, 1927.

Purchased during year—

£101 9s. 3d. New Zealand 4 per cent Stock, 1943-63.

PAYMENTS FOR THE YEAR 1914.

PAYMENTS.

	£	s.	d.	£	s.	d.
HOUSE ACCOUNT				595	10	0
Rent	465	0	0			
Insurance (including Insurance against War risks on Library, £10,000)	41	16	7			
Repairs	2	19	7			
Lighting, Heating, and Water	53	2	0			
Other expenditure	32	11	10			
	595	10	0			
SALARIES AND WAGES				384	19	10
PRINTING AND STATIONERY				27	9	11
LIBRARY—New Books				13	3	11
JOURNAL ACCOUNT				549	16	4
Printing	475	11	3			
Illustrations	28	7	11			
Postage	45	17	2			
	549	16	4			
DONATION TO PALL DICTIONARY (Final Donation)...				10	10	0
POSTAGE				31	15	9
AUDITOR'S FEE				5	5	0
CLEANING AND RESTORING PICTURES				31	5	0
SUNDRY PAYMENTS				3	14	2
PURCHASE OF £201 9s. 3d. NEW ZEALAND 4 PER CENT STOCK, 1945-63				200	0	0
				1,853	9	11
BALANCE BS at December 31, 1914, being cash at				768	2	10
Bankers and in hand						
Lloyds Bank, Limited	487	13	7			
Post Office Savings Bank	278	13	3			
Petty Cash	0	7	3			
Postage	1	8	9			
	768	2	10			

£2,621 12 9

We have examined the above Abstract of Receipts and Payments with the books and vouchers of the Society, and have verified the investments therein described, and we hereby certify the said Abstract to be true and correct.

W. CREWDSON,
 for the Council.
 R. SEWELL,
 for the Society.
 N.E. WATERHOUSE, F.C.A.,
 Professional Auditor.

J. KENNEDY, Hon. Treasurer. LONDON, February 27, 1915.

SPECIAL FUNDS:

RECEIPTS.				PAYMENTS.			
ORIENTAL TRANSLATION FUND.				ORIENTAL TRANSLATION FUND.			
1914.				1914.			
Dec. 31.				Dec. 31.			
Balance ...	£	s.	d.	Printing, Vols. XXII, XXIII	£	s.	d.
Sales ...	...	...	...	Binding "	153	18	9
Interest ...	...	...	...	Postage ...	11	19	6
	...	...	...	Insurance of Quire Stock at	2	2	0
	...	...	...	Printers ...	...	...	...
	...	...	...	Balance carried to Summary	1	12	6
	...	...	...		169	12	9
	...	...	...		258	1	7
	...	...	...		£427	14	4
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				
				

SPECIAL FUNDS (continued).

RECEIPTS.

PAYMENTS.

MEDAL FUND.

	£	s.	d.	1914.	1915.	£	s.	d.
1914.								
Jan. 1.	42	5	10	Dec. 31.	Balance carried to Summary	...		52 17 4
Balance ...	...	...	...		
Dividends ...	...	...	...		
Interest ...	...	...	...		
	10	11	6					
	<u>£52 17 4</u>							<u>£52 17 4</u>

PUBLIC SCHOOL MEDAL FUND.

	£	s.	d.	Dec. 31.	Cost of Medal Printing, etc.	...	£	s.	d.
Jan. 1.	25	10	5		Book Prizes and Binding	...	5	0	0
Balance ...	...	...	...			...	7	5	5
Dividends ...	...	...	...			...	7	16	0
Interest ...	...	...	...		Balance carried to Summary	...			
	19	16	7				20	1	5
	<u>£45 7 0</u>						25	5	7
							<u>£45 7 0</u>		

SUMMARY OF SPECIAL FUND BALANCES.

	£	s.	d.	Cash at Bankers—On Deposit Account	...	£	s.	d.
ORIENTAL TRANSLATION FUND	...	...	...	On Current Account	...	...	...	...
INDIA EXPLORATION FUND	...	...	...		
PRIZE PUBLICATION FUND	...	...	...		
MONOGRAPH FUND	...	...	...		
MEDAL FUND	...	...	...		
PUBLIC SCHOOL MEDAL FUND	...	...	...		
	<u>£733 2 0</u>							<u>£733 2 0</u>

FUND.

£500 Nottingham Corporation 3 per cent Irredeemable B Stock
(Prize Publication Fund).
£325 Nottingham Corporation 3 per cent Irredeemable B Stock
(Medal Fund).
£615 11s. 2d. Nottingham Corporation 3 per cent Irredeemable
B Stock (Public School Medal Fund).

We have examined the above Statement with the books and vouchers, and hereby certify that (W. CREWEDSON, for the Council.
R. SEWELL, for the Society.
N. E. WATERHOUSE, F.C.A.,
Professional Auditor.

February 27, 1915.

J. KENNEDY, Hon. Treasurer.

FORLONG BEQUEST.

ABSTRACT OF RECEIPTS AND PAYMENTS FOR THE YEAR 1914.

RECEIPTS.

AMOUNT OF BEQUEST AND INTEREST RECEIVED FROM THE EXECUTORS OF THE LATE GENERAL FORLONG	£	s.	d.	£	s.	d.
DIVIDENDS ...	...	...	...	5,069	5	5
Bengal Nagpur Railway 4 per cent Debenture Stock ...	...	...	...	95	1	0
South Australian Government 4 per cent Inscribed Stock, 1940-60 ...	18	17	0			
East Indian Railway Company Annuity, Class "B" ...	18	19	3			
New South Wales 4 per cent Stock, 1942-62 ...	19	15	5			
India 3½ per cent Stock ...	18	15	2			
	18	14	2			
	95	1	0			

INTEREST ON DEPOSIT ACCOUNT ...

...	16	13	5
	£5,150	19	8

FUND.

£1,010 Bengal Nagpur Railway 4 per cent Debenture Stock, £1,015 16s. 3d. South Australian Government 4 per cent Inscribed Stock, 1940-60.	
£45 East Indian Railway Company Annuity, Class "B" ...	
£1,005 14s. 7d. New South Wales 4 per cent Stock, 1942-62.	
£1,143 6s. 3d. India 3½ per cent Stock.	

We have examined the above Abstract of Receipts and Payments with the books and vouchers, and W. CREWEDSON, for the Council,
have verified the Investments therein described, and we hereby certify the said Abstract to be true { R. SEWELL, for the Society,
N. E. WATERHOUSE, F.C.A.,
Professional Auditor.

February 27, 1915.

PAYMENTS.

LEGAL EXPENSES ...	...	...	...	£	s.	d.
OTHER EXPENDITURE ...	...	...	...	15	9	0
PURCHASE OF STOCK ...	...	...	...	2	6	
£1,010 Bengal Nagpur Railway 4 per cent Debenture Stock ...	...	...	...	5,070	7	2
£1,015 16s. 3d. South Australian Government 4 per cent Inscribed Stock, 1940-60 ...	...	...	...	1,012	13	3
£45 East Indian Railway Company Annuity, Class "B" ...	...	...	...	1,013	8	5
£1,005 14s. 7d. New South Wales 4 per cent Stock, 1942-62 ...	...	...	...	1,017	8	8
£1,143 6s. 3d. India 3½ per cent Stock	...	...	...	1,013	8	5
	...	...	...	1,013	8	5
	£5,070	7	2			

Balance as at December 31, 1914, being
cash at Bankers ...

...	95	1	0
	£5,150	19	8

Meetings are—by Dr. Spooner, "Excavations at Patali putra"; by Professor de la Vallée Poussin, "Ma Définition du Grand Véhicule"; by Colonel Sykes, "The History of Persia"; by Professor Macdonell, "The Development of Hindu Iconography"; and by Mr. Legge, "The Worship of Mithras and its Mysteries".

(c) The miscellaneous pages contain many interesting contributions, and the Notices of Books form, as usual, a useful feature.

8. Since the last Anniversary Meeting, the Oriental Translation Fund has published Volume 23, "Vis and Ramin", translated from the Georgian by Mr. Wardrop: from the sales this appears to be of great interest. Another work sanctioned for this series, but unavoidably postponed owing to the War, is the translation of the "Ottoman Conquest of Egypt by Ibn Iyas": Major Salmon, the translator and editor, is absent on active service.

9. Volume 16 of the Monograph series has just appeared, containing "Tablets from Lagaś and other Babylonian Sites". The Society is indebted to Dr. Pinches for doing this work, and to Mr. Randolph Berens for financial assistance in its publication.

10. The Public School Gold Medal for 1914 was won by Mr. H. W. Beck, of Denstone College, Rocester, for his Essay on The East India Company; and the Medal was presented by Lord Ronaldshay on the 23rd June.

11 (a). Under Rule 30 the Rt. Hon. Syed Ameer Ali and Sir Charles Lyall retire from the Office of Vice-President.

The Council recommend the election of Mr. Longworth Dames and Professor Margoliouth.

(b) Under Rule 31 Mr. Kennedy, Mr. Fleet, and Dr. Codrington retire from their respective offices of Hon. Treasurer, Hon. Secretary, and Hon. Librarian.

The Council recommend their re-election.

(c) Under Rule 32 the following ordinary members retire:—Sir Ernest Satow and Sir George Scott.

Other vacancies are caused by the retirement of Professor Arnold and Professor Rapson, and a third by the nomination of Mr. Dames as Vice-President.

The Council recommend to fill these five vacancies the election of—

The Rt. Hon. Syed Ameer Ali.

Mr. Blagden.

Sir Charles Lyall.

Mr. Sewell.

Mr. Vincent Smith.

(d) Under Rule 81

Mr. Crewdson,

Sir George Scott,

Mr. Waterhouse.

are nominated auditors for the ensuing year.

DR. GASTER, in moving the adoption of the Report, said that they would agree that it was absolutely satisfactory from the point of view both of finance and of membership. There was an advance of thirteen in membership as compared with the previous year, so that in spite of the natural disappearance of members from death and other causes they had every reason to be satisfied that numbers were kept up by fresh additions. They might hope to go on widening the circle of scholars who were interested in the work the Society was doing. They had been able to meet not only their normal expenditure, but the extraordinary expenditure under three heads, two of them due to the War, referred to in the Report. He welcomed the outlay on the restoration of the pictures in the Society's possession. These works of art, the existence of which had become almost unknown for years past even to members of the Society, had come to light again for an expenditure of about £60 spread over two years. Many faded pictures could again

be seen in their pristine beauty and glory, and thus many members would realize anew the value of beautiful works of art which had come from the East. They would also be made available for those who were interested in art generally, who would come to know how many beautiful things were now to be found in the rooms of the Society. Besides meeting this extraordinary expenditure the Society had been able to put aside a substantial sum, not for bad days, but, as he believed, for the time when the Society would be able to expend still further for the work which lay before it.

Attention had been drawn in the Report to the literary output of the Society. To his mind this was the primary fruit of their work and the main justification for the existence of the Society. They had reason to be proud of the work accomplished in the field of science and letters in realizing the aim of the Society as the best medium towards making the East known to the West. That work had met with great success during the ninety years or so of the existence of the Society, and even in these troubled times they had been able to produce more than 1,100 pages of solid matter, forming a valuable contribution to our knowledge of the East. This was an achievement of which they had every reason to be proud. On previous occasions the strength of intellect, depth of scholarship, and fidelity to truth had been put to the test; but they had never been put to a more severe test than at the present time. Although the minds of all were inevitably preoccupied by the War, and in many ways they had to devote themselves to the pressing troubles of the hour, the fact that so many students had given sufficient time and attention to many abstract problems of the East showed that the Society was resting on a very solid foundation. But they must not rest satisfied with what they had already accomplished. There were still before them great fields of

research and problems going back thousands of years awaiting further investigation. They had the satisfaction of reflecting that at a time of such heavy trials and troubles they were working for the future greatness of this country in a manner not unlike that of their sons and brothers on the field of battle. They and the Society were also fighting for truth, for light, for freedom, for the advance of science, for mutual charity, for mutual humanity, for a better recognition of what was best in man, and for the ideal that humanity should form one great family and men of different races and creeds should learn to appreciate and know one another much better than before. By continuing the work, by steady literary output, and by producing articles like those which were appearing in the Journal, which covered practically the whole field of the East, they were trying to decipher and to bring to life again the philosophies and civilizations of the past, and thus to hold a torch of learning to illuminate the present. Those who had read the Journal during the past year would see how many fruitful fields had been touched, and as they turned its pages they would mourn the loss of so promising a scholar and soldier as Captain Binstead, who had been able to give them so vivid a glimpse of the lamas of Central Asia. His article would form a permanent monument to one who had given his life for his country. They had also been glad to welcome other young members whose work had shown that the future of Oriental learning was not dependent on the older generation alone, but that a new generation was coming forward to hand on the torch.

MR. YUSUF ALI said he need not follow Dr. Gaster in his survey of the satisfactory work of the past year, but he would like to make a few observations as to the literary work. As Dr. Gaster had well pointed out, the Journal seemed to be what might be called the most important of the activities of the Society. In this connexion he

would like to refer to his own experience. He joined the Society twenty years ago, and during the greater part of that time he had been very far away from headquarters. It had been his lot in India to serve in very out-of-the-way districts where books were scarce and where one could gain very little current reading except the daily paper. In those situations one felt a longing for something that would take one away now and again from the narrow world and the few men and women one saw to the larger world both of the present day and of remote ages. So when the Journal of the Royal Asiatic Society made its quarterly appearance it came as a most welcome guest. When he was in camp in the cold weather in lonely districts the Journal came as a gleam of light which took him back, which showed him, as through a time machine or a *Jame-jamshed*, earlier periods of the world's history.

In the second place he would like to notice a very welcome transformation that was only just beginning in the Journal and in the activities of the Society. When he joined the Society the Journal was almost entirely devoted to matters of archaeological interest. Of late some articles of modern interest had been given, and quite lately they had had in the rooms of the Society a lecture on modern Indian music. Some people who looked upon learning as a matter of archaeology and of ancient research might possibly feel doubtful about this new departure, but for his own part he would like to urge that the departure was in the right direction and likely to make the work of the Society more fruitful in the future. In the study of the past they ought not to detach themselves entirely from the present or from the future that was just going to follow the present. In all departments of archaeological study they found that the tendency of present-day scholarship was to treat ancient problems from the modern point of view. Professor

Gilbert Murray was a brilliant example of scholarship which was absolutely in the front rank of classical knowledge, and which yet threw light on the dark corners of our life to-day. He had devoted his splendid talents to an attempt to bring the old learning into relation with the modern facts of life. He thought that if this was being done in the field of classical study, it was even more necessary in regard to the ancient learning of the living East.

There had been to a very great extent a divorce between students of the ancient East and those who were interested in the modern East. They knew that a far larger number of people were interested in the different countries of the modern East than in the ancient East, but obviously the roots of the present in all the countries of the East lay very far and deep down in the past. It was only by bringing the past to illustrate the present and throw light upon the problems of the future that we should be able in the field of action to produce the solid results which we should all have at heart, for the true aim of scholarship was not only the discovery of objective truth, but to relate the truths we found to the actual problems of the time. In all the countries of the East tremendous forces were at work wholly transforming the thought and mode of life of the people, and we could only understand the peculiar trend of those forces by keeping constantly before our eyes the ancient forces which produced the societies in which these modern changes were taking place. If that was forgotten we should not be able to work out the future with the same sureness of touch as if we tried to base our administrative action on a true understanding of the past. The Society had amongst its members a large number of men who were not merely scholars, but who were soldiers, administrators, men of action, and to them it was of the utmost

importance that the results of accurate scholarship and deep research should be easily accessible and available. To those who specialized in ancient learning it was of equal importance that the modern trend of thought and action in the countries comprehended by those researches should also be available; for the present was in many cases the best interpreter of the past.

He believed that the School of Oriental Studies which had been so long talked about was within measurable distance of achievement. It had been thought that the sphere of the School would be entirely different from the sphere of this Society, inasmuch as it would deal with practical problems, while the Society mainly dealt with ancient learning. But it seemed to him that while the primary object might be different in the two cases, the result, the ultimate goal, was the same in both, namely, the discovery of truth, the study of facts, and their application to modern problems. The establishment of the School ought to help the work and activities of the Society by interesting many more people in its proceedings and in the Journal. He would only add that, while in the past, as he had said, he had found the Journal most helpful in keeping him in touch with the progress of research, now that he would have more time to pursue his studies and breathe the atmosphere of the larger libraries, he was quite sure that he would find it as helpful as before. He begged to second the adoption of the Report.

MR. W. COLDSTREAM, in supporting the motion, said it was satisfactory to know that there was a fair increase in membership and also an increase in invested funds. The Society had a membership of 700, an income of nearly £1,900, and its invested funds amounted to some £2,600. But he ventured to ask if these resources in membership and money were sufficient for a Society with the great aims and objects they had in view. Neither in

these respects nor in the accommodation which it supplied to members did the Society adequately meet its great aims and objects. Within the means at its disposal it was doing most valuable work, as Dr. Gaster had eloquently shown, though he agreed with Mr. Yusuf Ali that more might be done to modernize the aims of the Society. It existed, as they knew, for the encouragement of the arts, literature, and science of the East. The encouragement which it gave to the arts and sciences of the Orient was comparatively small, though as regards literature it was *the* great medium through which research and Oriental learning were carried out in the West. But he did not think the Society occupied the field which it might fairly be expected to occupy. As regards membership, the population of the countries embraced within the scope of the Royal Asiatic Society might be put at fully 1,000 millions. When they considered this they saw that the membership, prosperity, and popularity of their Society, and its bulk in the eyes of the public, were extremely small. But they must not allow that to discourage them, as the Society fulfilled a most important function, and had had a very honourable history. In this connexion he might mention that he had unsuccessfully inquired for some history of the Society comprehensively showing the membership and achievements of the past ninety-two years, and he would like to suggest that some such record should be prepared. He regretted that there was not in London, the capital of the British Empire, any building which could be regarded as an adequate presentation of India and the East, and that their Society, which was the oldest representative of Eastern interests in the British Isles, was not more adequately supported, and possessed such inadequate accommodation. These rooms were not fitted to be the home of a great Society like theirs, although he was aware that they had been in recent years improved and brightened. The Society was fulfilling

a great and valuable purpose, but he ventured to think that there might be possibilities of great development in its work and in the facilities it had for representing Eastern studies to the West.

THE CHAIRMAN said that he was only a substitute for their President and his words would be few. The finances of the Society had been spoken of in very favourable terms, but it was to be remembered that the year to which the Report related was peaceful for more than half its term, while the year through which they were now passing was one of continued war. It was to be feared, therefore, that at the next anniversary meeting a much less favourable condition of things financial would be disclosed. The War had touched them as it had touched every home in England, and they would suffer from it in the future. They had listened to Mr. Coldstream with interest, and he was sure they would have thanked him with more appreciation than they were able to give him, though that was very much, if he had shown some way by which their membership and resources could be extended. They did the best they could with the means at their disposal, and they very much desired to have larger means. They would like to have more spacious rooms for their library and the extension of their work, and also for the exhibition of those art treasures of which they had heard, some of them for the first time. With the help of a Committee who were interested in art matters they had had their valuable pictures cleared from the grime of ages, and they had a great number of specimens of Oriental art which no one had seen, at least not for years. He thought it might be a good thing, and perhaps tend to increase the membership of the Society, to have a show of these beautiful things when the work of restoration was completed. They might invite their friends to come and see them and encourage them to join the Society. He sympathized with what had been said

by Mr. Coldstream as to want of recognition of the art side of the life of the East in their work. But he could not say that the subject had been entirely absent from the Journal, for in recent years they had had several papers on art matters. But it had to be admitted that these did not hold the same place of honour as subjects of discussion as the history, laws, languages, and philosophy of the East. He hoped that the suggested exhibition might help to quicken their interest in these matters.

Another point he wished to bring to notice was that of the hospitality this country was now giving to Belgians driven from their own homes. There was, as they all knew, a colony of learned men from Louvain now living at Cambridge. That colony was endeavouring to carry on a most valuable publication which for several years had been produced at Louvain, *Le Muséon*, and the first number produced under these conditions had been published by Cambridge University. Upon the reception the publication met with its continuance would depend. He thought that not only in the interests of learning, but also in those of hospitality to an injured people, we ought to show our appreciation of the efforts of these homeless wanderers of science by doing our best to keep their lamp burning, and he begged to commend to their attention the prospectus of *Le Muséon* in the last number of the Society's Journal.

As to the references made to the School of Oriental Studies in London, he thought they might hope to see that realized, at any rate so far as the limited means available permitted, some time early next year. The building had been put in the hands of the architect, and would be ready probably by the autumn, and by then they hoped that the governing body would have been constituted, and would have found teachers to start the work in a number of important departments.

Mr. Coldstream made a very interesting suggestion,

which perhaps the Secretary had already thought of. As he said, the Society had been in existence for ninety-two years, and in eight years more its centenary would be reached. The Council hoped that by that time they would be able to present to the members, and to the world outside, a centenary volume. He well recollected some years ago in Calcutta the celebration of the centenary of the first of all Asiatic societies—the Asiatic Society of Bengal—and the production of a centenary volume which was greeted with great appreciation. He was sure their own Society would be able to show a tale of work in these hundred years hardly inferior, if inferior at all, to that of the Asiatic Society of Bengal. He hoped the members would co-operate in promoting the preparation of this valuable volume, and he was sure they would find in it much to give them hope and encouragement.

He would like to say, in conclusion, how deeply year by year their debt accumulated to their Secretary. The satisfactory condition of their finances was almost entirely her work, and the beautiful perfection with which the Journal was issued was entirely her work. Their thanks to her were so great that it was difficult year by year to find any fresh way of expressing them. But the vote of thanks they would give most cordially was the only return their poor hearts could offer.

The Report was adopted, and the recommendations of the Council for the election of officers, and the vote of thanks to the Auditors, were agreed to.

PRESENTATION OF PUBLIC SCHOOLS MEDAL

At a meeting of the Society on June 8, 1915, with Lord Reay, the President, in the chair, Sir Hugh Barnes, K.C.S.I., K.C.V.O., presented the Public Schools Medal and prize to Mr. H. A. Mettam, of Merchant Taylors' School, and prizes to Mr. Lamley, of Eton, and Mr. Bickersteth, of Shrewsbury.

THE PRESIDENT announced that the Triennial Gold Medal of the Society had been conferred on Mrs. Agnes Smith Lewis and Mrs. Margaret Dunlop Gibson. It was impossible to separate them in the award, as these sisters had always been united in their brilliant efforts in the study of Syriac and Arabic literature. It was very appropriate that in a year when so much was being done by women to relieve the sufferings of the other sex inflicted on the field of battle this recognition should be given to ladies. The Council were unanimous that the award could not be given to two more deserving scholars than these two ladies.

THE REV. DR. NAIRN, Head Master of Merchant Taylors' School, said that on behalf of the School and of his pupil and friend Mr. Mettam he had to acknowledge the award of the Medal. Mr. Mettam had close ties with India, for he was born in Cawnpore, and his father could not be with them that day as he was now residing in that celebrated town. Possibly Mettam might at a later date go out to India and there take up his career. If he should not do so, the chief and perhaps the only reason would be considerations of health. The winning of the Medal would be a lasting memory to Mettam in whatever career or course of study he might pursue, and it would be a stimulus to the section of the school which pursued the important study of the history of India.

SIR HUGH BARNES: When I received the invitation of your Society to come here to-day I accepted it with a light heart, as it seemed to me the presentation of a few prizes would not be a very formidable matter; but when I was shown the speeches which you have listened to on previous occasions and saw the names of the distinguished persons by whom they were delivered—most of them Secretaries of State for India or Ex-Viceroy—I confess I felt considerable dismay; a dismay not unmingled with wonder that your Council

should take the risk of asking a comparatively unknown man like myself to occupy a position hitherto taken by such very eminent people. But although I may not be able to give you an address of the quality to which you have been accustomed, I need hardly say that I regard it as a great honour to be asked to come here this evening, and it will be a great pleasure to me to talk to you a little about "Delhi Past and Present", which is the subject of the essays this year.

I do not think I need say much about the Public School Prize and Medal Fund. Most of you know that it owes its foundation to the generosity of a few Indian Chiefs and gentlemen, and that out of the income derived from the funds thus provided the Society undertook, in the case of seven of our principal Public Schools, to give annually to each school a prize for the best essay on a given Indian subject, and also a Medal for that essay among the prize essays which was judged to be the best. Latterly a number of other schools have desired to take part in the competition for the Medal, and I believe the total number at present on the Society's list is over thirty. In the future, therefore, the competition is likely to become very keen. In the present year only four schools have competed—Merchant Taylors', Eton, Shrewsbury, and Plymouth. This, of course, is to be explained by the War, and considering the terrible anxieties and distractions of the time, the demands made on our schools for the Officers' Training Corps, and the splendid way in which our boys have responded to the call, it is perhaps a wonder that there should have been any competition at all. I am heartily in sympathy with the object of the Society in starting this competition, viz. the encouragement of the study of Indian history and geography in our Public Schools, and we owe the Society a debt of gratitude for the lead they have given in this matter.

Delhi is a very big subject, and as our time is short

I must confine myself mainly to my own experience of the place. But there are a few conclusions and reflections arising out of its history to which I should like to call your attention. You know, of course, that in historic times there have been no less than seven cities of Delhi. There is modern Delhi built by the Emperor Shah Jahan, and to the south, covering no less than 45 square miles, extend the ruins of six earlier cities in which, speaking generally, the only buildings remaining are the mosques, the shrines, and the tombs of the great men.

The first point I would mention is that I suppose there is no more blood-stained tract in all the world than the area occupied by these seven cities and their immediate neighbourhood. It is not necessary to go back to ancient history to establish this fact. Take only the 600 years of Muhammadan rule in India from 1191 A.D. to 1803, when Lord Lake drove out the Marathas from Delhi and established British supremacy. During these 600 years no less than eight dynasties reigned in Delhi, six of which were crowded into the first 320 years of the period.

What you have to remember is that each one of these dynasties was established by violence and force, and, if we except the first five reigns of the Mughals, the story of the succession of individual kings is more or less a weary repetition of rebellious sons, of Muhammadan mutinies, and of Hindu revolts. Also during these 600 years Delhi on four occasions was given over to days of sack and massacre by invaders from without; first of all by Tamerlane in 1398, then by the great Nadir Shah in 1739, again by Ahmad Shah, Nadir Shah's great Afghan captain in 1756, and finally by the Marathas towards the close of the century. On the other hand, it is pleasing to recollect by way of contrast that since 1803—with the one exception of the memorable events of the Mutiny in the summer of 1857—we have given Delhi 112 years of uninterrupted peace and prosperity, probably the longest

period of tranquillity the city has ever enjoyed within historic times.

Next I would remind you that Delhi owes its stormy history mainly to its geographical position. The history of Northern India from the earliest times is, as you know, largely the history of repeated invasions from the north-west. If you look at a meteorological map of India, where the rainfall is shown in varying depths of colour, you will see that from a thin wash on the Afghan frontier, where the rainfall is about seven inches a year, the colour gradually deepens as you go south-east till you come to the deep green of the semi-tropical vegetation of Lower Bengal. I like to think that all these invaders—Aryan, Turk, Afghan, Pathan, and Mughal—came pouring down from the arid steppes of Central Asia in pursuit of the rainfall; they were in quest of a land of greater plenty, and their main objective was Hindustan, the rich plain in the basins of the Jumna and Ganges Rivers. But the only road by which they could reach this "Promised Land" was through the gap which lies between the Himalayas on the north, and the great Indian desert, which you will see stretches from a little south of Delhi almost to the shores of the Indian Ocean. That desert was and still is impassable for armies, and so the invading hordes poured in succession through the gap, only to find Delhi, the gate of Hindustan, standing sentinel at the far end. Hence the frequent struggle for its possession.

The same advantage of position, which gave Delhi its strategic importance in its early days, has made it in our time a great railway centre. When I went out to India forty-one years ago there was no railway across the desert. Even now after all these years there is only one small single-track narrow-gauge line in the south, which is of little or no military importance. So you will see that all the great trunk lines of India which connect the rich south and east with the Panjab, the frontier, and with

Karachi down the Valley of the Indus necessarily pass through the same gap, and all converge upon Delhi. Now that our frontier is pushed forward to the edge of the Afghan plateau, the scientific frontier desired by Lord Lytton, and that with our sea power we can land troops at Karachi and reach the Panjab, up the Indus Valley, the strategic value of Delhi is not as great as it was; but it will always be a position of importance, and situated as it is in the midst of the most virile races of India, the Sikhs, the Rajputs, the Jats, and the bulk of the northern Muhammadans, Delhi, in the event of trouble whether from within or without, is likely, I fear, to maintain its reputation as one of the storm centres of India.

Next, I would remind you that Delhi's claim to be called an Imperial city rests on a very brief pedigree. We can hardly dignify with the title of Emperor the Pathan and Afghan kings who ruled there, though some of them, no doubt, carried their arms far to the south and east. The first Muhammadan Empire of India was that of the Mughals, which was founded by Babar in 1526; and the fact on which I wish to lay stress is that the capital of the Mughals in the heyday of their prosperity—i.e. during the reigns of Babar, Humayan, Akbar, and Jahangir—was Agra, not Delhi. The splendid red sandstone fort and palace at Agra were built by Akbar, the greatest of the Mughals, and so far from wishing to return to Delhi we know that he began to build another capital south of Agra at Fatehpur Sikri, the magnificent remains of which are one of the sights of India. Even the Emperor Shah Jahan began his reign at Agra; it was he who built there the famous Taj-Mahal and the Moti Masjid, or Pearl Mosque, and it was only in the middle of his reign that, with that passion for building which seems to have possessed all the Muhammadan kings and emperors, he decided to erect another capital at Delhi. His city, the modern Delhi which we know, was completed in 1650.

and you will see that from that date to 1803, the date of Lord Lake's victory, is only 153 years.

Lastly, I would refer to the belief prevalent in England, and also to some extent among Europeans in India, that Delhi has a hold upon the imagination of the people of India, that it is still a name to conjure with, and that its selection as the future capital of our Indian Empire was therefore sure to be enthusiastically welcomed by all classes of the community, both Hindu and Muhammadan, because of its historical associations. That is the view taken very naturally by all our young essayists, for it is the popular view, but I cannot say that it is in accord with my own Indian experience. It presupposes, you will see, a united India and something akin to a common national consciousness or sentiment. But one of the first things we are taught, or ought to be taught, about India is that it is not one country but several countries, not one nation but several nations, and it is still true that feeling and sentiment in India is not yet national but mainly racial and provincial. I spent most of my Indian service on the frontier in Baluchistan and I never heard the tribesmen speak with any special pride or enthusiasm of Delhi. Their hero was Ahmad Shah Durani, and their attitude is, I think, typical of that of other parts of India. Each race or community thinks first of its own capital, the Sikhs of Lahore, the Marathas of Poona, the Muhammadans of Eastern Bengal of Dacca, and so on. Moreover, the memory of Delhi was not altogether a pleasant memory, for it was associated with recollections of unbridled ambition and of unrestricted and often tyrannical personal rule. My own impression is that the modern reputation of Delhi is largely of our own making, and rests partly on the recollection of the famous siege in the time of the Mutiny which made Delhi a household word in England, and partly on its selection on three separate occasions as the site for a great Imperial assemblage or Durbar.

To turn now to the history of Delhi in our own time, it is hardly possible to speak of Delhi without some reference to the great events of the Mutiny; but as time is short I am afraid I must follow the example of one of our young essayists, the winner of the Medal, who dismisses the Mutiny in half a dozen lines with the remark "that the events of that time belong less to Delhi than to the general history of India". I will only say this, that in the present perilous times we are able to appreciate as we probably never appreciated before the strained anxiety with which the people of England during those memorable summer months of 1857 awaited news of the great struggle at Delhi, on which for a time at least the fate of Northern India was depending. In our studies of the Mutiny, when we have been thrilled by the stories of the courage, endurance, and heroism displayed by Englishmen in those eventful months, I daresay many of us have sometimes wondered whether in these modern days of wealth and luxury our countrymen would again display the same qualities if they were put to the test. That doubt has for ever been set at rest by the splendid heroism of our troops on the plains of France and Flanders. It is also a legitimate source of pride and satisfaction, and a great tribute to the qualities of the British Raj, that to-day there are fighting with us in defence of the Empire, in the Persian Gulf, in Egypt, in the Dardanelles, and even in France, not only representatives of the same gallant races—the Sikhs, the Pathans, the Panjabi Muhammadans, and the Gurkhas—who shared with us the peril and the glory of the great siege of 1857, but also probably the descendants of many who then fought against us.

During the last forty years Delhi has been the scene of three great pageants—Lord Lytton's historic Assemblage in 1877, when Queen Victoria was proclaimed Empress of India; the Coronation Durbar of King Edward VII,

which was held by Lord Curzon in 1903 in the presence of the Duke and Duchess of Connaught; and King George's great Durbar in 1911. I was fortunate enough to be present at two of these Darbars. I attended Lord Lytton's Assemblage as a young officer of three years' service, and as Foreign Secretary I was entrusted by Lord Curzon with the management of the Durbar of 1903. It is interesting to look back and note some of the contrasts between those three great assemblages, and the gradual *crescendo* of pomp and circumstance which they exhibited. For example, in the matter of locomotion Lord Lytton's Durbar was largely a Durbar of horsemen. Only two railways had reached Delhi in 1877, and railway facilities elsewhere were small. Consequently most of the chiefs from Rajputana, Central India, and the Panjab came riding into Delhi at the head of their picturesque bodies of retainers just as they might have ridden to a Durbar in the old days of the Mughals. By 1903 Delhi had already become a great railway centre, and both the chiefs and the heads of local governments came in gorgeous special trains and were able to bring with them their own splendid equipages. This Durbar was therefore largely a Durbar of special trains and carriages. At the 1911 Durbar railways were even more in evidence, and, apart from the railways, it was markedly a Durbar of motor-cars.

Another contrast was this. Lord Lytton's Durbar was almost exclusively one of officials and chiefs, for the proclamation of the Imperial title mainly affected the Rulers of the Native States. Lord Curzon, on the other hand, at the Coronation Durbar, endeavoured to bring together representatives of all classes of the population from every part of India. Each local government was invited to bring with it as the guests of Government the leading men, British and Indian, of every community in their province. The design was to make the celebration

not only official but public, and those of us who were present will recall the magnificent success of Lord Curzon's great conception. The same procedure was followed in 1911 to an even greater extent, and one of the most remarkable sights, I am told, was the enormous concourse of natives from the surrounding districts who flocked into Delhi to catch a glimpse of the King-Emperor, and who on the day of the Durbar crowded the great embankment which surrounded the Durbar area. The King's Assemblage of 1911 was in fact not only a Durbar but a great popular festival.

Perhaps the greatest contrast was in the attitude of the chiefs. In 1877 most of the chiefs were unacquainted with each other. They were old-fashioned and ultra-conservative, and they came together with some doubt and hesitation both as to their own position, and as to what might be the meaning of this novel assumption of the title of "Empress". The question of the precedence of chiefs from different parts of India, who had never before met, presented apparently insuperable difficulty, for no chief was inclined to admit that any other was superior to himself. This difficulty was got over by avoiding presentations and by placing Lord Lytton alone in a central dais or kiosk, while the chiefs and heads of local governments were seated together in the front row of a pavilion carefully shaped as the segment of a circle, of which the Viceroy's dais was the centre. Thus everyone was equally distant from the Viceroy, and none could claim precedence over anyone else. In 1903 a new generation of chiefs had arisen. Many knew English and had travelled in England. The precedence difficulty was not absent owing to the fact that on this occasion all the chiefs were presented to the Viceroy and the Duke of Connaught. It was surmounted by dividing the great horseshoe in which the Durbar was held into blocks according to provinces, and all the chiefs of a province,

great and small, came up to be presented together. It was found that within a province the chiefs had a recognized order of precedence among themselves. In 1911 all difficulties appear to have been smoothed over by the enthusiastic devotion displayed to the person of the King-Emperor.

The last great event in the history of Delhi is the transfer to that city of the capital of the Government of India. That was, and is still to some extent, a controversial subject, and as this is a learned and not a political Society it would not be proper for me to express an opinion upon it, but I can give you the facts. The interesting point to bear in mind is that since the early days when the Governor of Bengal became the Governor-General and handed over the government of his provinces to Lieutenant-Governors, the Government of India have had no distinct home of their own. As you know, their summer headquarters have for many years been at Simla, where they reside alongside the Lieutenant-Governor of the Panjab. In the winter they used to move to Calcutta, where they resided along with the Lieutenant-Governor of Bengal. In 1911 it was decided to appoint again a Governor of Bengal of the same rank and status as the Governors of Bombay and Madras, and as it was not considered suitable that a Governor and the Viceroy should reside in the same place, it was decided to move the winter capital of the Government of India to Delhi, the summer capital remaining at Simla as before. Now Delhi since the Mutiny has been a part of the Panjab Province. But on this occasion, following the examples of Washington, and of Ottawa, and of Canberra in Australia, it was decided to include Delhi and a few miles of surrounding country in an enclave which should be under the direct administration of the Supreme Government. That has been done and the Government of India have at last their own separate habitation outside the limits of any province. It is not,

of course, a very central position; indeed, a glance at the map will show that, if you take the whole of the Indian Empire including Burma, Calcutta is the more central place of the two. But whatever opinions we may hold as to the general policy of the change of capital there is no doubt that to Delhi itself the move will be an unmixed gain. Instead of remaining, as it was when I went out to India, a somewhat derelict, rather uncared for, and half-forgotten city situated in a corner of a province (the Panjab), whose capital was elsewhere, it will become once again the centre of Indian administration. We are building there an eighth city, not, you must remember, a native city. There is no intention, so far as I know, of removing the natives from their existing homes in the present city and its suburbs. What we are building, so I understand, is a sort of "West End" or "Westminster" of the existing city, which will contain the great Government buildings, the houses of the officials, and the cantonment for the troops. There we may hope the genius of the architects, Mr. Lutyens and Mr. Baker, will succeed in raising buildings not unworthy to stand in proximity to the masterpieces of Shah Jahan. Under the fostering charge of the Supreme Government, provided, as in time it certainly will be, with all the amenities and conveniences of modern civilization, with the chaos of its ancient ruins reduced to some sort of order and plan, and with its famous old buildings renovated and restored if necessary, or in any case preserved and guarded with jealous care, Delhi—in the cold weather—is likely to become in the future a paradise for the historian, the archaeologist, and the sightseer. Nor will it be without attractions for the sportsman, and I am sure we shall all re-echo the hope so eloquently expressed in the telegram sent by the Princes of India to the King after his return: "that the historic change of capital may mark the beginning of a new era which will ensure greater

happiness, prosperity, and progress to all the peoples of India."

And now, Mr. Mettam, it is my pleasant duty to present you with the prize and the medal which you have won. The subject this year was a very difficult one, and in dealing with it your essay displays a general balance and restraint which have, I am sure, largely contributed to your success. I notice that two years ago Dr. Nairn, when speaking at one of these meetings, observed that while boys were ready to read the Indian history of the last 150 years, they found the tangled history of Hindu and Muhammadan dynasties dull and unpalatable. When therefore he heard that the subject this year was Delhi with its history, running back into the legendary past, he must have felt some qualms as to how his boys would face the test, and it must be a peculiar satisfaction to him to find that it is one of his own boys who has won the first prize. We all very heartily congratulate you, Mr. Mettam, and Merchant Taylors' School on your success.

Up to this year Merchant Taylors' and Eton in the competition for the medal had tied with three wins each. This year, although Merchant Taylors' had forged ahead, Eton has come in a very good second with an excellent essay by Mr. Lumley, and I have much pleasure in presenting you, Mr. Lumley, with your prize. You will be pleased to know that your essay was considered to be deserving of the medal if there had not been competition, and it indicates wide and careful reading. The third place is awarded to Mr. Bickersteth, of Shrewsbury, whom I congratulate on the prize he has won. I read this essay with much interest. Its fault, perhaps, is that there is not enough of it, but it has been rightly described as a lively and spirited attempt to define the place of Delhi in history. Mr. Warne, of Plymouth College, whose essay is placed fourth in order of merit and is also awarded

a prize, has unfortunately not been able to come here this afternoon.

THE PRESIDENT: We have all listened with keen appreciation to the remarks of Sir Hugh Barnes. We welcome in him one of the most distinguished members of the Indian Civil Service, to which Service India owes so much. It is partly due to the splendid work of that Service that we have the Indian Forces fighting our battles at this moment in France, in the Dardanelles, and elsewhere. Credit should also be given to the British officers of those regiments for the confidence with which they have inspired their men, and which has made it possible to transfer those men to scenes which were entirely novel to them. That remarkable confidence which, according to the testimony of all those at the Front, Indians showed in their officers, is a result of the humane way in which they deal with their troops, thereby setting up a contrast to the system prevalent amongst the Teutonic hordes now let loose on the Continent of Europe.

I wish to compliment Dr. Nairn on the way in which Merchant Taylors' School has emphasized the importance of historical study of India. If ever there was a time that we could appreciate the importance of the study of history it is now. When we come to the conditions of peace in this War—and I for one would not be so rash as to predict when that will be—the conditions of peace, as we know on the testimony of our own Ministers, will be based on the recognition of nationalities. The recognition of nationalities means very careful study of history, and this is especially so in the case of the Balkan countries, where various nationalities lately united against the common enemy. For the establishment of a permanent peace there we shall have to consult history to know with accuracy the limits which will have to be drawn in that country. As regards India, when our

commanders lead the Sikhs, the Gurkhas, and the Mahrattas, and the other races which are now fighting our battles, it is necessary to know something of the military history of India and of the various qualities of those troops to understand what is going on. And if we wish to derive pleasure from the various accounts of their conduct in the field given in the newspapers it can only be by having some knowledge of the characteristics of the parts of India from which they severally come. I entirely agree with Sir Hugh Barnes that India is rather a federation of provinces and states, each possessing a distinct character, than a centralized empire governed from head-quarters. But there must be a central authority, and we may congratulate India upon the building of a new capital and the formation of the enclave. The question of selection of a new capital is liable in these days to be controversial, as we know from the discussions which have taken place in Australia. But in regard to the Indian transfer, while perfect harmony is not to be expected, everyone is agreed that for parts of India distant from Calcutta, such as Bombay, there is an advantage in the selection of Delhi, since the shortening of distance will enable more people therefrom to get access to the Central Government. Distinguished administrators here this afternoon will agree with me that it is very desirable that in dealings with the Government of India there should be opportunities of verbal communication, rather than the endless correspondence which encumbers the archives of both the Central and Provincial Governments.

As we have met for the presentation of the Public School Medal, we cannot fail to allude to the patriotism and bravery which have been shown by so many of the boys who have just passed through them. The roll of honour which is being kept by each of these schools will appeal to future generations of boys to show their

gratitude for what their predecessors have done, and will stimulate them to emulate in the arts of peace the spirit they have shown in the arts of war. In reference to the Medal scheme, I need not go over its history. We began in 1904, and we are now in 1915. I hope the competition next year—I will not say be better in quality, for I think the winning essays we have had are very good, but will elicit more essays. I trust that the Head Masters of other schools will follow the example of the Head Master of Merchant Taylors, and will enter into the lists. Otherwise I should almost be afraid that the Medal will become the monopoly of Merchant Taylors'—and even in the view of Dr. Nairn that is not desirable. I hope the prize-winners to-day will continue to study Indian history; that they will take an interest in modern Indian developments, and that if any of them go out to India in the Civil Service they will have careers as eminent as that of Sir Hugh Barnes; and I am sure they will not forget in after life, wherever they may be, the ceremony of this day.

MR. E. WOOLLEY, Master of the Merchant Taylors Company, spoke of the extreme value of the teaching of Indian history from the standpoint of our Imperial responsibilities. Such study tended to a due sense of proportion, and there could be no greater fallacy than that as the study of history related to people of the past it was of no use in meeting the problems of the present day. As Master of the Company which looked upon Merchant Taylors' School with affectionate regard, he wished to say how extremely proud they were that Mettam had added to the laurels of the school by carrying off this prize.

PRESENTATION OF THE TRIENNIAL GOLD MEDAL

Mr. Austen Chamberlain, M.P., Secretary of State for India, who was accompanied by Mrs. Chamberlain, received the President, Officers, and Council of the Society at the India Office on the afternoon of June 15, and kindly presented the Triennial Gold Medal to Mrs. Agnes Smith Lewis (Hon. D.D. Heidelberg, LL.D. St. Andrews, Ph.D. Halle-Wittenberg, Litt.D. Dublin) and her sister, Mrs. Margaret Dunlop Gibson, the holder of like degrees.

MR. CHAMBERLAIN said: The Royal Asiatic Society have done me the honour, in virtue of the office I hold, to ask me to present their Triennial Gold Medal to Mrs. Lewis and Mrs. Gibson, whom we welcome here to-day. I say it is in virtue of my office, for you will readily understand that I am not an expert in the studies in which these ladies have done such remarkable work. I feel that it is something of a disadvantage that someone better acquainted with those studies, and more in a position to judge of his own knowledge of their value, and therefore to appreciate the achievements of these ladies at their full worth, should not make the presentation this afternoon. But I gladly join with the Society in doing honour to the recipients of the Gold Medal, which is awarded once in three years and may truthfully be said to be the blue ribbon of Oriental research. It has been awarded in the past to men of high distinction in this field of activity. To mention only the most recent names, it was received in 1912 by Dr. Fleet for Indian epigraphy, in 1909 by Sir George Grierson for languages and philology of India, and in 1906 by the Rev. Dr. G. U. Pope for Dravidian scholarship. On this occasion it is conferred upon Mrs. Lewis and Mrs. Gibson jointly for their labours in Syriac and Arabic research, and for their remarkable achievements therein. Mrs. Lewis is known to the world of Orientalists by her many volumes of studies published in conjunction with her sister under

the titles *Studia Sinaitica* and *Hortæ Semiticeæ*. She discovered the Sinaitic palimpsest containing the most ancient Syriac text of the Gospels, a discovery of the highest importance for the textual criticism of the New Testament, and her edition of this MS., with English introduction and notes, published in 1910 is the most complete and valuable that has yet appeared. In conjunction with her sister she has also produced the best edition of the Palestinian Syriac Lectionary, based on two MSS. discovered by herself, in addition to those whereon the editions of previous editors had been founded. In the two series of works to which I have already referred, there are numerous texts in Syriac and Arabic illustrative of Christian antiquities, catalogues of MSS., and facsimiles of value for the history of palæography. The latest discovery of Mrs. Lewis—*Leaves from three Ancient Qurans, possibly pre-Othmanic*—published last year, is of importance for the history of Islam, and adds in some respects a new field of achievement to her already very considerable studies. Mrs. Gibson has also made many valuable contributions to Oriental literature, notably her edition of the *Commentaries of Ishodad of Merv in Syriac and English*, published in 1911. I have been curious to know how these ladies were drawn to these studies, which have led to such valuable results. I am told that a journey to Egypt led them to desire to become acquainted with the language spoken there, and that that first led them to the study of Arabic. As we know, they subsequently extended their investigations to a wider field. I think we may congratulate ourselves that so many years ago they made their journey to Egypt, and may heartily congratulate them on the success which has attended their labours elsewhere. I now have the honour to present the Medal to them.

MRS. LEWIS: Mr. Chamberlain and Lord Reay, I can hardly express my gratitude to you and to the Council

of the Royal Asiatic Society for the great honour which you have conferred on me and my sister in the bestowal of this Medal. It is an honour which we could never have imagined coming to us. And I find it difficult to know in what way I have deserved it. When I think of certain recipients of this Medal; of the only two whom I have personally known—Sir George Grierson and the late Professor Cowell—I can see that it needs no knowledge of Indian languages to understand the great importance of their work; and in the case of Professor Cowell it had effects which cannot be recorded on paper. In my case, the importance of my work lies more in the value of the MSS. I have discovered than in anything I have ever written about them. The most important of these is certainly the Sinaitic palimpsest, and I cannot help recalling one of its readings in St. Luke's Gospel, where we are usually told that when we have done our very best we ought still to say that we are "unprofitable servants". The Sinaitic palimpsest leaves out the word "unprofitable", and if only one other very old MS. could be found which corroborates this, we should have a good reason for thinking that it was never spoken and that it is an interpolation, so that we do not really need to talk about ourselves as unprofitable. I do not know what my Puritan ancestors would say to my presumption for thinking so, but I really believe that there is nothing in our Lord's teaching contrary to the view that even very humble work may be very profitable indeed. I can only add that I am extremely grateful for this unexpected pleasure and honour, and I am the more grateful that you have associated my dear sister with me therein.

Mrs. GIBSON: I thank you most heartily for the honour you do me in associating me with my sister in this signal award. I came into this world as a supplement to her, and have always recognized that it was mine to take a second place. But you will agree with me that it is

better to be second in a good cause than to be first in a bad one. The great joy I have had in my studies is fittingly symbolized by this Gold Medal, the line of the shape of which has no end in this world, and I verily believe will have no end in any other world.

LORD REAY: Mr. Chamberlain, I rise to move a very cordial vote of thanks to you for having so kindly consented to present the Medal on this very auspicious occasion. It is also a very remarkable occasion, as this is the first time that the Medal has been given to any lady, and also the first time that two scholars have received it jointly, and those scholars are twin sisters. I am sure that the Royal Asiatic Society could not have made a better selection. The Council of the Society were absolutely unanimous about the bestowal of the Medal, and I hope that Mrs. Lewis and Mrs. Gibson will be encouraged by the award to go on in the work of making important contributions to Oriental literature and research, to which they have devoted their lives.

I have only to add that the Royal Asiatic Society has always maintained with this Office the most cordial relations, and I am sure that while you, sir, preside over the destinies of the India Office those relations will be even more cordial. It is of the utmost importance that India should be better known to our own people at home. The Journal of the Society is not intended for the man in the street, but it certainly does uphold the honour of English Orientalism, and I am happy to say that its exceptional value is recognized in all foreign countries. When we see what is being done for the promotion of Oriental studies in Paris, in Vienna, and in Berlin, it must be admitted that we in London are not exactly in the first line. But I am happy to say that the structural alterations at the London Institution in Finsbury Circus for the School of Oriental Studies will be completed in time for the School to be established next January. I hope we may rely on

your support, Mr. Chamberlain, so that the School may be able to hold its own with all the similar institutions there are abroad.

I must add what a pleasure it is to me to be in this Office to-day and to see you presiding over its destinies. It is always a pleasure to anybody who has come to my age to see the son of a very distinguished father, with whom I had most friendly relationships, following in his steps and emulating his career. I hope you will be very successful in emulating it, and that you will long be presiding at the India Office, to face the very many anxious problems which will come up for solution in relation to India. I beg to move a very hearty vote of thanks to the Secretary of State.

MR. CHAMBERLAIN: I thank you for your kind expressions. It is a great pleasure to take part in this little ceremony, and thus to make a first acquaintance with the Royal Asiatic Society. I am glad to hear of the good relations which have prevailed between this Office and the Society, and I hope that while I am here they will certainly not become less cordial than in the past. I shall view with very real sympathy the efforts which are made to encourage Oriental studies in this country, and to place Great Britain, as it should be, well in the forefront in that field of study and research. Lord Reay said that he hoped my influence would be used to enable the new School of Oriental Studies to hold its own. That phrase had a rather ominous sound in my ears. As an old administrator I have noticed that it has often been followed later on by the presentation of a little bill, or at least a request for financial support. Well, I suppose a few days ago, before I took office, I should have said without hesitation that I thought our Government—indeed, all Governments in this country—had been slow to recognize their duty in regard to matters of that kind. Now that I have taken office I have become more

conservative, and I am reminded that in this Office I have the Council of India to control any desire on my part to spend money. But in spite of these things I may say that the work of the institute will have my sympathy, and that on proper cause being shown we in this Office may be able to afford it further support.

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XXIII

JAHIZ OF BASRA TO AL-FATH IBN KHAQAN¹ ON
THE "EXPLOITS OF THE TURKS AND THE
ARMY OF THE KHALIFATE IN GENERAL"

By C. T. HARLEY WALKER

PREFACE

THE treatise of Jāhiz, of which a translation is given in the following pages, was published at Leyden in 1903 by Brill. The editor was Van Vloten. But he died before completing the work; it was continued and sent to the press by de Goeje. Since then another edition has appeared at Cairo from the "Maṭba'a al-Taḡaddūm" by Muḥammad Effendi al-Sāsy al-Maghriby. I have used the Cairene edition for my translation. In the Leyden edition there are two other opuscula (*rasā'il*) besides the one translated here, namely those entitled "The Boast of Black People over White" and "The forming of Squares and Circles". In the Cairene edition there are eleven *rasā'il* in all, including the three of the

¹ Al-Fath b. Khāqān. A Turk, wazīr to Mutawakkil, together with whom he was assassinated. He was the patron of the poet Buḥtārī. For his devotion to literature Yāqūt in the *Dictionary of Learned Men* compares him to Jāhiz himself and to Ismā'il b. Ishāq.

Leyden edition, the titles of the remainder being as follows :—

- The Envious Man and the Object of his Envy.
- The Superiority of Speech to Silence.
- The Praise of Merchants and the Blame of the Work of Government.
- Love and Women.
- Keeping One's Promise.
- Exposition of the Practices of the "Faction".
- Gradations of the Competent.

A long account of Jāhīz appears in Yāqūt's *Dictionary of Learned Men*, recently edited by Professor Margoliouth in the series of the Gibb Memorial Committee. His full name was 'Amr b. Baḥr b. Maḥbūb Abu 'Uthmān al-Jāhīz. He was born in 150 and died in 255 A.H. Yāqūt speaks in the highest terms of his attainments, and relates a number of stories to show how eminent a person he must have been. He records, for instance, that a non-Arab once expressed an opinion ranking Jāhīz with 'Umar the Pious Khalif and Ḥasan of Baṣra as the three greatest men among the Arabs, each in virtue of his own special qualities, a sufficiently high compliment.

He was devoted to literature; and his works deal with a very wide range of subjects. Several of the topics discussed in the following pages were further handled by Jāhīz in separate treatises, e.g. those on the claims of Qaḥṭān and 'Adnān, on the equalization of Arab and non-Arab, on polo (كتاب الصوانجة), on the Imamate, and on passive resistance (كتاب العثمانية). There is a section about Khorasān in the Book of Misera. Jāhīz refers to several of these treatises in the preface to his Zoology; and there is a long list of them at the end of the article in Yāqūt. Being a client himself, our author was naturally disposed to represent that class of the community in the most favourable light.

He was an eminent theologian, among his works being one on "The True and False Prophet", and one against Christianity. As the founder of a particular sect of Mu'tazelites he has a place in the standard work of Shahrastāny.

It may be gathered from what follows that he occupied a high position at the Court of Baghdad. He addresses this *risāla* on the Turks to Fath b. Khāqān the wazīr. His book on rhetoric was sent to the famous Qādy Abu Du'ād, the Zoology to Abu Du'ād's opponent Muḥammad b. 'Abdulmalik al-Ziyāt, both works being handsomely recognized. At the end of his life Jāhiz suffered from paralysis.

The numbers in square brackets refer to the pages in the Cairene edition.

In conclusion, I have to express my best thanks to Professor Margolionth for originally suggesting the undertaking of this work, and for the time and care which he has since bestowed on supervising it. But for such assistance it could not have attained its present shape. I have also to thank the Royal Asiatic Society for accepting the work for publication.

LETTER I

In the Name of God the Compassionate, the Merciful. God is the Giver of every favour.

God direct you according to orthodoxy and assist you to thankfulness; and prosper you and your handiwork; and make us and you persons, who speak justice and do it and prefer it, even to enduring inconveniences that it may involve; and whose portion thereof is not merely describing it and knowing it, but also encouraging others to it and devoting themselves to it, and removing the veil from it and bringing it to its owners and patiently securing that it shall not go to others, and persevering in realizing it among them. For God, Highly Exalted, did not instruct

the people that they might be knowers only and not doers. But He instructed them in order that they might act, and gave them enlightenment, that they might be pious. And people seek enlightenment for fear of falling into calamities and tumbling headlong into the abyss of destruction; and for love of safety from ruin and for eager quest of what is profitable they put up with the burden of the task of acquiring knowledge and hurry to the annoyance of endurance. And because there are few that know and many that prescribe remedies, the ancients said: "More know than describe, and more describe than do." And the reason why there are so many descriptions and so few things described is that the reward of the work is to come, whereas the endurance of the labour is immediate.

And indeed I was delighted at your loyal obedience to your superior and your zealous administration of the affairs of your Khalif, and the care with which you guard against any defect that enters in to mar his government, however slight, or that has attacked his authority, however insignificant; and against all that conflicts, though imperceptibly, with his pleasure, or thwarts his will, though without doing any serious mischief. And I admire your anxiety lest he should find that the misinterpreter has a way to attack him, and the foe a handle against him [3]. For a ruler will be sure to find a revengeful misinterpreter, and someone who is angry because judgment has gone against him, and someone who complains because his decision has been corrected, and someone who has been stripped of his possessions and is a keen critic, and someone who thinks his own counsel perfect, fond of vain talk in his discourse, strongly disposed to hate a straightforward course and to oppose the government; as though he were the public forager and the trustee of the inhabitants of the kingdom, and putting himself in the place of the watchers, and in the part of

observer of the Khalifs and Wazirs. He will not admit an excuse, although there may be clear ground for excuse; and he will not pause where there is room for uncertainty. And he will not allow that the man on the spot sees what the man who is absent does not, and that the proceedings of a policy cannot be understood except by knowledge of its provenance, or what is behind it except by a knowledge of what is before it. He will be sure to find some person who has suffered loss and resents it; some base person spoilt by favour; some complainant of delay, who has already received many times his due, and because of his ignorance of his worth and the narrowness of his imagination and his ingratitude he thinks that what is still due to him is greater, and that he ought justly to receive more; and he will find persons asking for more, who, if the Sultan were to take back his benefits formerly shown towards them and favours bestowed on them, would deserve such treatment and be receiving their due, having been deceived by length of respite and rendered insolent by length of leisure. And he will find the instigator of rebellion, insignificant in the community, but leader of a faction, loud in tumult, who has been banished by His Majesty the Sultan, whose bentness has been straightened by discipline, and who has been justly humiliated by the law; and in consequence is wroth, never feeling ought but disgust, only happy [4] if he is making mischief, never resting except in the gratification of his desires; the friend of none save every lying mischief-maker, seditious, suspicious. He is sure to find the greedy man, in whom there is no good, and the foolish man, in whom there is no profit, who wants to be made the equal of the competent, and to be exalted above the champions because of something once done by him, and some service rendered by someone else; and he is not one of those who increase old with new; and he does not trouble about the obliteration of honour. And he cannot

distinguish between the reward of the earners and care of the sons of benefactors. And how can a man know the difference between the client's right and the reward for active duty¹ when he does not know the degrees of justice in its gradations, and does not distinguish between the degrees of what is worthless in their proportions?

Then you have shown me thereby how you began with yourself in magnifying your chief and preserving the exploits of the helpers of your Khalif. And you protected yourself by protecting his adherents and speaking in support of his friends. And you may render the best possible assistance, if God will, in enforcing obedience and in conducting the administration for the good and assisting the people of the truth. And I infer from what I have seen of the great vigilance of your attention and your abundantly solicitous care, and your inquiry into the affairs of foes and your investigations into the exploits of friends, that what is visible of your honest advice is a mere trifle by the side of what is hidden of your sincerity. And may God grant His Khalif the benefit of your services and favour us and you with His love. And may He preserve us from speaking what is false and the approach of vanity. Verily He is to be praised and magnified, He does what He will.

Now you mentioned—God preserve you—that you have sat with miscellaneous specimens of the troops of the Khalifate and with a number of the sons of the cause and elders of the nobility of the faction² and with mature

¹ This is an allusion to the *فرض كفاية*, or as it is also called *فرض على الكفاية*, which Lane explains as follows: "That whereof the observance is obligatory on the collective body of the Muslims, and, in consequence of the observance thereof by some, becomes of no force in respect of the rest." Cf. Shihāzī Tanbih, ed. Jaynoll, p. 287:

والجهد فرض على الكفاية إذا قام به من فيه الكفاية سقط الفرض
عن الباقيين
² "The sons of the cause." These are the supporters of the 'Abbasid claims. "The faction," i.e. the 'Alids.

members of the Court and with men having a reputation for loyalty and religious sincerity rather than for loyalty out of hope or fear. And a man from among that company and a follower of that society extemporized freely in speech and monopolized the conversation like one who is proud of himself. And, indeed, he had not [5] consulted their spokesmen nor waited for their orators. And he uttered paradoxes and rushed wildly on to words and asserted that the army of the Khalifate consists to-day of five divisions, those of Khorasān, of the Turks, of the Clients, of the Arabs, and of the Banawys¹; and he was full of praise and thanks to God for His goodness and His benefits and all His favours and gracious dealings and for the inclusiveness of His good providence and the generosity of His bounty in associating in a common obedience men of these diverse dispositions and various classes and different inclinations. And you opposed this man in his rash statement and hardy assertion most vigorously, in that he made these divisions and classified these elements and severed their genealogies and sundered their classes and separated between their pedigrees. And you denied what he said, and objected most strongly. And you expressed an opinion that they were not other than united, or nearly united. And you said, I maintain that the Khorasāny and the Turk are akin, and that they come from a single region, and that the case of those Easterns and the matter of that region is the same and not different, and closely connected not divided. And if their roots are not firmly fixed in the same stem, yet they resemble one another. And the borders of the countries which include them, even if not identical, correspond. And in the aggregate they are all Khorasānys, though particular clans are distinguished by particular characteristics and discriminated in certain respects. And you expressed an

¹ The Banawys. These were immigrant barbarians living in Arabia Felix.

opinion that the difference between Turk and Khorasāny is not so great as that between Arab and non-Arab or Greek and Slav or Negro and Abyssinian, not to mention [6] other more dissimilar cases. But the difference is like that between the Meccan and the Medinite, the nomad and the villager, the man of the plain and the man of the mountain. And it is like that between the Ṭā'ite¹ of the plains and the Ṭā'ite of the mountains, or as one might speak of the Hudhaylites² as the Kurds of the Arabs. And it is like the difference between one who resides in the bed of the valley and one who resides on the slope and between one who resides on the high ground and one who resides on the low ground. And you assert that even if these differ in some of their idioms and are unlike in some of their characteristics, even so differ the highest tribe of Tamīm³ and the lowest of Qays,⁴ and the incorrect Hawāzin⁵ from the correct Hijāzites; these differences, again, for the most part are similar to those between Himyar and the provinces of Yemen.

And with the variety of idiom goes that of physiognomy and temperament and character. Yet all the same they are all pure Arabs of unmixed blood, in no sense hybrids. And they are not so widely different as the B. Qaḥṭān and the B. 'Adnān⁶ in consequence of God's stamping on them differentiation by particular characteristics, and the Almighty's apportioning to the folk of each valley their own stature and physiognomy and temperament and speech. And if you say, "How, then, are their children all Arabs, considering the differences between their fathers?"

¹ A northern tribe dwelling in Tayma and the surrounding district.

² A tribe to the south-east of Mecca.

³ A tribe between Baṣra and Yemāma.

⁴ A tribe bordering on Tamīm.

⁵ A tribe in the neighbourhood of Medina.

⁶ Qaḥṭān and 'Adnān were the reputed ancestors of all the Arab tribes. 'Adnān was supposed to be the descendant of Ismā'īl (Ishmael) and Abraham. To 'Adnān belonged the so-called immigrant Arabs (Musta'riba), to Qaḥṭān the tribes of Yemen.

we reply, "Since the Arabs are all one tribe, having the same country and language and characteristics and pride and patriotism and temperament and disposition, and were cast one mould and after one pattern, the sections are all alike and the elements resemble each other, so that this became a greater similarity than certain forms of blood-relationship in respect of general and particular and agreement and disagreement: so that they are judged to be essentially alike in style" [7]. And these relations produced yet others, in virtue of which endogamy was introduced.¹ And the whole of 'Adnān were averse to intermarriage with the B. Ishāq, Ishāq being brother to Ismā'il, while they approved all along of intermarriage with the B. Qahtān, Qahtān being son of 'Ābir. And in the agreement of the two Arab divisions to intermarry with each other, but to exclude from intermarriage all other nations from Kisrā downwards, there is evidence that they are agreed about their origin, and these theories take with them the place of the closest [attested] relationship.² And you assert that he wanted disintegration and disruption into nations, while you wanted identity and association. And you assert also that the Banawy is a Khorasāny, and that the genealogy of the sons is that of their fathers. And what the fathers have done nobly and the grandfathers have wrought excellently in days of yore constitutes the dignity of the sons. And that the clients are more like the Arabs and are nearer to them and in closer contact with them, because the Law treats the clients as Arabs in many respects, because they are Arabs for legal claims for the purposes of blood-money and for inheritance. And this is the sense of the saying of the Blessed Prophet, "The client of the people is one of themselves. And association of clientship is like

¹ i.e. there exists greater identity between different tribes than between certain members of one family.

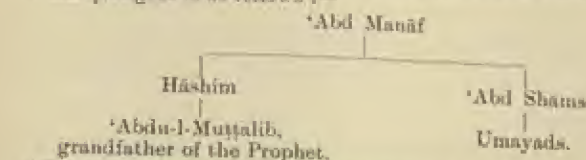
² i.e. to be an Arab is the same as to be an actual cousin; "wanted disintegration . . ." i.e. wanted to establish diversity.

association of kindred." And analogously the ally of the tribe belongs to them and is reckoned with them. And Akhnas b. Sharif, a man of Thaḳīf, and similarly Ya'la b. Munya, a man of B. al-'Ady, and Khālid b. 'Urfata, a man of 'Udhra came to belong to Quraysh.¹ And on that reckoning of descent it is forbidden to bestow alms on the clients of the B. Hāshim.² For the Blessed Prophet in the matter of immunity and purification assigned them the status of their patrons. And on that account the Blessed Prophet gave precedence to the B. 'Abdīl Muṭṭalib over the B. 'Abdi Shams;³ although their connexions are equally honourable and they trace their descent from one line, owing to their precedence in alliance and their services that are agreed. And the Blessed One said, "Ours is the best horseman among the Arabs, 'Ukkāsha b. Muḥṣin." And Ḍorār b. al-Azūr al-Asady said, "Is he [8] one of us, O Apostle of God?" "No," replied the Prophet, "he is one of us by right of confederacy."⁴ And so he made the confederate of the people one of them, as he made the people's sister's son one of them. Then you assert that these Turks became associated with the people in this genealogy, and came to belong to the Arabs for this cause, together with the fine disposition which distinguishes them and the noble

¹ Al-Akhnas, etc. All three were contemporaries of the Prophet. Ya'la b. Munya was an important authority on the early history of Islam. He was appointed a commander in A.H. 11.

² Having one-fifth of the booty the Prophet's family did not need alms.

³ The pedigree is as follows:—



⁴ Ḍorār is mentioned in the *Dictionary of the Contemporaries of the Prophet* as having dwelt at Kufa. According to the same authority 'Ukkāsha was present at Badr and was a confederate of the B. 'Abd Shams.

character which has been given them. Moreover, the alliance of the Turks was made with the kernel of Quraysh and the choice part of 'Abdī'l-Manāf and the honourable part of Hāshim; and Hāshim is to Quraysh as the bridle on a horse's cheek and the necklace on the full breast of a girl. And it is as the concealed jewel and the pure gold and as the yolk of an egg and the eye in the head and the breath in the body, and as the prominent features and the camel's hump and the china clay and the gleaming pearl and as green meadows and as red gold. So they have become associated with the Arabs in their genealogy and with the clients in their connexion; and they have surpassed them with such a unique superiority, that none other attains to it, however excellent, and no dignity exceeds it, however eminent, and no glory, however ancient.

And you assert that the kinship was close and not distant. And on account of that nearness of kinship they render help and assistance and obedience and advice and devotion to the Khalifs and Imāms. And you mention that he stated the sum-total of the claims to distinction of these races and the generality of the virtues of these tribes, and that he put it altogether and classified and summed it up and explained it, but that he forgot to mention the Turks and did not allude to them and kept silence about them and gave no account of them, as he did about the claims of every other tribe and the pretensions of every other clan.

The Case for Khorasān

And he mentioned that the Khorasāny says: We are chieftains and the sons of chieftains; we are nobles and the sons of nobles. And we provided the 'Abbāsīd missionaries, before nobility could be displayed or high qualities made known [9], and before there was contending for superiority and public assertion and uncovering the

veil and ceasing to conceal dissent for fear of the consequences.¹ And it was through us that the kingdom of our foes ceased from its place, and the kingdom of our friends was established in its dignity. And besides that there is all we have suffered in being killed and exiled and slaughtered with sword and spear. And we have been cleft with iron swords and punished in various ways. And by our means God has healed the afflicted heart and accomplished His vengeance. And ours are the twelve nobles and the seventy chiefs. And we are the Men of the Moat² and the sons of the Men of the Moat, and the Peers and the sons of the Peers. And to us belong those that make tents of camel's hair, and that discharge far arrows of the nim-tree. And to us belongs the completion of the conquest of Harrân and the people of Jûratân.³ And to us belong the Shouters and the Freemen. And we have conquered the lands and killed the people and destroyed the foe in every valley. And we are the people of this dynasty and the missionaries of this claim and the root of this tree; and from our direction blows this wind. And there are two kinds of Helpers. Al-Aws and Al-Khazraj⁴ helped the

¹ Cf. Qur'ân, Sura iii. In Umayyad times it was dangerous to be a 'Alid or 'Abbâsid.

² i.e. as good as those who fought for the Prophet at the Battle of the Moat, A.H. 5. The "peers" are the champions at Badr accepted by the Meccans. The "twelve nobles and seventy chiefs" are an allusion to the negotiations of the Prophet with the people of Yathrib preceding the flight. At the first 'Aqaba (b. Ishâq, p. 288) the Prophet appointed each of the twelve, who swore allegiance to him, *naqib*, over his own tribe for the purpose of converting them. They were all Anṣâr, one of them being 'Ubbâda b. Sâmîṭ. The seventy (actually seventy-three) chiefs were similarly appointed to promote the cause of the Prophet in Yathrib at the second 'Aqaba (b. Ishâq, p. 305).

³ Emend as follows:—

ومنا المستجيبة ومن يمرخ النيمة ومنا تم حران واصحاب الجوراتان;
 (whence استجيب being a field tent of camel's hair, Jûratân being a place in Ispahân.

⁴ The two tribes of Yathrib.

Blessed Prophet in early times; and the people of Khorasān helped his successors in later times. This is how our fathers brought us up and how we bring up our children. That is the only ancestry we acknowledge and the only religion we profess. Then we have only one way of life and a system of ordinances with which we associate no other. We profess devotion to the house of the Prophet and practise it strictly, and kill according to its ordinances and die professing it; our badge is familiar, and our uniform is well known. And we are the people of the black standards and of trustworthy traditions and attested narratives.¹ And we are they that assail the towns of the tyrants and withdraw sovereignty from the hands of the unjust. In us history goes back and traditions are sound. And in a tradition there is a description of those who shall conquer 'Amorium² and gain victory over it and kill its warriors and enslave its offspring, as follows: "Their hair is that of women, and their clothing is that of monks."

And the fact confirmed the prophecy, and the witness of the eye verified the report. And we are they who have been mentioned, and whose services were mentioned by the chief of the Imāms and by the father of the ten Khalifs, Muḥammad b. 'Aly,³ when he wanted to send [10] propagandists to the countries and to distribute his party in the towns, in that he said: "As for Baṣra and its territory, it has been won by 'Uthmān and his adherents.⁴ And there are only a few of our party

¹ Trustworthy traditions, i.e. a definite body of Sunna as opposed to the secret tradition of the Shi'ya party. "People of trustworthy traditions," i.e. people referred to in such traditions. The "black standards" refers to a tradition of the Mahdy. Cf. b. Mājah, ii, 269. Black was the colour of the 'Abbāsids, white of the Umayyads, red of the Khawārij, green of the 'Alids.

² 'Amorium, conquered by Mu'tasim in war against Byzantium 223 A.H.

³ Father of Ibrahim the Imām, Saḍūh and Maṣḍūr.

⁴ The death of the "pious Khalif" 'Uthmān was a standing example of "passive resistance". Cf. b. Faḡh in Bibl. Geogr. Ar., ed. de Goeje, v, 315.

there. And as for Kufa and its territory, it has been won by 'Aly and his party. And there are only a few of our party there. And as for Syria, it is of the party of the B. Marwān¹ and the family of Abu Sufyān. And as for the Arabian peninsula, they are Harūrys, Shurāt,² and open rebels. But you must look to this part of the East. For there are trusty bosoms and gallant hearts not to be corrupted by evil desires or infected by diseases or implicated in heresy, though they are angry and revengeful. There is number and equipment and preparation and courage." Then he said: "And I regard the quarter of the dawning of the day as the most propitious."³ So we were the best force for the best Imām, and confirmed his opinion about us and established his counsel and justified his insight. And he said on another occasion: "This business of ours is Eastern and not Western, of the front not of the rear; and it will arise like the sun and spread over the countries like the daylight, till it reaches as far as one can walk, and extends as far as a camel can trot."

They said: "And we killed the Ṣaṣṣahiya and the Dāliqiya and the Dhakwāniya and the Rāshidiya. And we are also the 'folk of the Moat' in the days of Naṣr b. Sayyār and b. Judī the Kirmāny and Shaybān b. Salma the Khārijy. And we are the companions of Nubāta b. Hanẓala and 'Āmir b. Dōbāra and of b. Hubayra.⁴ And

¹ B. Marwān, etc., i.e. the Umayyads.

² Harūrys, a group of Khawārij, from Harūra, a village near Kufa, where they assembled. Shurāt, i.e. those who buy Paradise with their swords.

³ "Dawning of the day." This is also a reference to Tradition.

⁴ Ṣaṣṣahiya, etc., the final helpers of Marwān, "The Ass," when the Umayyads were overthrown in A.H. 132. Naṣr b. Sayyār was the governor of Khorasān under Marwān, when Abu Muslim raised the standard of revolt in the name of the 'Abbāsids. Naṣr b. Sayyār at that time had his hands full in dealing with b. Judī the Kirmāny and Shaybān the Harāry leader, who succeeded Al-Daḥḥāk as leader of the Khawārij. Nubāta b. Hanẓala and 'Āmir b. Dōbāra were generals of Marwān against 'Abdullah b. Mu'āwiya at Kufa in 127 A.H. b. Hubayra was a general of Marwān, who fought the Khawārij in 'Irāq.

ours is old and new, the beginning and the end of the 'Abbāsīd movement. And from us came the slayer of Marwān. We are people who have bodies and bulk and scalps and skulls; and our shoulders are broad and our foreheads wide and our hair coarse and our arms long. And we excel in the male offspring of our marriages, and our marriages are the most fertile, and few are the feeble and weak and diseased among them. And our women are prolific and excel in sinews and strength. And our frames are well used to bearing arms, and our shoes most fill the eyes. And we increase most rapidly and are most numerous and better equipped than other tribes. And even if Yāgug and Māgug were to vie in multitude with those of us that dwell beyond the river, our men would be superior to them in number. And in strength and [11] vigour after 'Ād and Thamūd and 'Amaleq and the Can'ānites there is not the like of our strength and vigour. And if the horses of the land and the riders of all the horses of high breed were gathered together for one race, we should be more numerous and more awe-inspiring. And when you saw our retinues and our horsemen and our flags, that none but ourselves carry, you would know that the only reason why we were created is the overthrow of dynasties and loyalty to the Khalīfs and support of the government. And even if the people of Tibet and the men of Zābaj¹ and the cavalry of India and the horses of Constantinople were to attack us, commanded by Hāshim b. Ishtākhanj,² they would be compelled to throw down their arms and flee into the towns. And we have beards and are patient, mighty in prudence and skill and profoundly intelligent, and we keep far from³ levity. And we are unlike the army of

¹ According to Yāqūt, *Geographical Dictionary*, an island at the extreme east of India between India and China.

² Rebel commander of cavalry in Africa in A.H. 152. Tābary, iii, 369.

³ Emend *في* for *عن*.

Syria and those who attack women and violate all that is sacred.¹ And we are a folk that keep faith and have self-control. And we combine moderation and contentment and patience in rendering service and mobilizing, when the danger is far away. And we have drums that strike terror into the foe and large banners; and we possess coats of mail and bells and epaulettes and long hair and twisted sheaths and curled moustaches and muslin caps and Shihry steeds. And the axe and the battle-axe is on our pack saddles, and the daggers are at our waists. And we know how to hang up our swords and to sit elegantly on our horses' backs. And we have shouts that make pregnant women deliver prematurely. And there is not [12] in the world any wonderful craft of culture and wisdom and science and engineering and music and workmanship and law and tradition, in which Khorasān has been concerned, but she has beaten the experts and surpassed the savants. And we make armour of felt, and have stirrups and breastplates. And we possess among our institutions for training and practice and preparation for war and training and practice in driving back the foe and attacking him with the spear, and in turning back our horses after flight, such games as 'Dābbūq' and leaping on our steeds, when young; and polo, when grown up. Then we practise throwing at the bird at rest and at targets and at the bird of prey on the wing. So we deserve better to be preferred and have the better right to the first place."

The Case for the Arabs

Then you said that he asserts that the Arab says that merit is earned by established relationship and inter-marriage and ancient association and obedience to parents and tribe, and by serviceable gratitude and adequate

¹ Those who attack women, a reference to the excesses of the Khawārij.

eulogy, and by measured verse, which endures as long as time and shines like a star, and is recited, so long as men start on pilgrimage and the east wind blows and the olive is pressed, by prose and speech worthy to be handed down, and description of the origin of the dynasty and argument on behalf of its claims and perpetuating its exploits, since the non-Arabs are not used to this, and this is not related as known to any but the Arabs. And we join it for ourselves in a chain of rhymed verse, and we make it fast by preservation in the memory of the unlettered, who do not rely upon compiled books and lines on parchment. And we are a race accustomed to contend for the prize in dignity and to accept the arbitration of every satisfactory umpire or brave diviner. We know the art of practising abuse as well as of composing panegyrics. None keep their genealogies as carefully as we, none are more tenacious of their rights and strict in defining them, both in prose and verse, with tongue more penetrating than the spear and sharper than the sword, so much that we remind people of things of which the traces have grown faint and the record of which is worn away [13]. Now there is a distinction between fighting in respect of liking and disliking; and the man who is an hereditary defender of his rights beats the new-comer to it. And this is a department in which the home-born of ancient lineage surpass the young and fresh. And the avengers are two, the man of Sijistān and the man of Arabia. And whence come the majority of the 'Abbāsīd generals if not from the pure Arabs and from the best part of this stock? For instance, Abu 'Abdīl-Hamīd Qaḥṭaba b. Shabīb the Ṭā'ite, and Abu Naṣr Mālik b. al-Haytham the Khuzā'ite, and Abu Muḥammad Sulaymān b. Kuṭhayr the Khuzā'ite, and Abu Dāūd Khālīd b. Ibrāhīm the Dhahlite, and Abu 'Amr Lāhiz b. Turayz the Muzanite, and Abu 'Uyayna Musā b. Ka'b the Murānite, and Abu Sahl al-Qāsim b. Mujāshī' the

Muzanite.¹ And who acted as generals? None as did Mālik b. Tawāf the Muzānite. And who was it that undertook the slaughter of Marwān, and who put to flight b. Hubayra, and who slew Ḍobāra, and who slew Nubāta b. Ḥanzāla, but those Arabs who followed the 'Abbāsid proclamation and were the pure-blooded followers of the ruling dynasty? And who conquered Al-Sind, but Musā b. Ka'b, and who Africa, but Muḥammad b. al-Ash'ath?"

The Case for the Clients

And you said that he said also, and the clients say: "We are the really loyal and the really affectionate; in us confidence may be reposed in time of adversity. And the weakness of the client below is what causes his affectionateness; for the honour of his patron redounds upon him, and his nobility increases the distinction of the client, whereas his obscurity diminishes the power of the client. And he would wish all the qualities of distinction were comprised in the patron, for the more grand and noble and conspicuous the patron is the nobler and more eminent is the client. And your client is your most whole-hearted supporter and your truest friend and envies you least."

The Arabs reply, "There is no connexion like that of descent." (Clients' answer) "We have got a descent of which the Arabs approve and an ancestry in which the non-Arabs glory." The Arabs say, "There are various kinds of patience."² We reply: "The noblest of them all is that which keeps a man from revealing a secret. And for this noble quality there is none to compare with a client. And we have special rights to

¹ Some of the eminent persons here referred to are mentioned by Ṭabarī (ii, p. 1358) as naqība appointed to carry on the 'Abbāsid propaganda in 'Irāq by Muḥammad b. 'Alī in 100 A.H. For Lāhiz b. Tarayz, Ṭabarī has Lāhiz b. Qurayz.

² i.e. the patience of an ass or a camel is not necessarily the best.

audience, and are most courteous in our service. And besides being obedient [14] and obliging and sincere and well-intentioned, we serve our patrons as a son serves a father or as a father serves a grandfather. And they are most at home with their clients, and most confident in them, and most delighted in their competence. And Al-Manṣūr and Muḥammad b. 'Aly¹ and 'Aly b. 'Abdillāh used to treat their clients with especial confidence, generosity, and kindness, and did not despise the negroes because of their colour, or the mean because of their meanness, or the followers of a humble trade because of its degradation. And they used to bid their older children look after them, and cause them (clients) often to offer prayer at the funerals of many of their dead (patrons), and that in the presence of their uncles and of their cousins and brothers.² And they used to remind each other of the kindness of the Blessed Apostle of God to Zayd b. Hāritha his client, in appointing him commander of the men of the B. Hāshim at the battle of Mūta and making him prince of any country he passed through. And they used to remind each other of his kindness to Osāma son of Zayd—father and son alike his favourites³—in setting him over the chief of the Companions and oldest of the Helpers. And they used to remind each other of his beneficence to the rest of his clients, such as Abu Anasa and Shaqrān and various others." And they say: "To us belongs the founder of

¹ Manṣūr, i.e. the Khalif. Muḥammad b. 'Aly, either the father of Manṣūr mentioned before or his brother imprisoned and slain at Harrān by Marwān.

² This is in contrast with what Khuda Bakhsh (tr. of Von Kremer, *Contributions to the History of Islamic Civilization*) says (p. 79)—"a client was not allowed to perform the funeral prayer over a deceased Muslim, if an Arab was present, however distinguished the client might be."

³ Zayd b. Hāritha, the Prophet's freedman and adopted son slain at Mūta. His son Osāma was confirmed in his command after the Prophet's death by Abu Bekr and sent to the Syrian border, A.H. 11. According to Ṭabary (i, 1165) Zayd was said to have been the first convert.

the empire, Abu Muslim 'Abdu-'l-Rahmān b. Muslim, and Abu Salama Ḥafṣ b. Sulaymān (now Abu Muslim was freedman of the Imām), the hubs of imperial policy,¹ who were responsible for the victory of the 'Abbāsids and the establishment of the new administration." And they say: "To us belong, among the chiefs of the nobility, Abu Maṣṣūr, client of the Khuzā'a, and Abu-l-Ḥakam 'Isā b. A'yan, client of Khuzā'a, and Abu Ḥamza 'Amr b. A'yan, client of Khuzā'a, and Abu-l-Najm 'Imrān b. Ismā'il, client of the family of Abu Mu'īt.² And to us belong the exploits of the people of Khorasān and the exploits of the clients in the 'Abbāsīd propaganda; and we belong to them and are reckoned among them and belong to their very selves, as no Moslem will dispute and none of the Faithful will deny; we served them in their riper years and carried them [15] on our shoulders in their childhood. Besides this we have the rights of foster-brotherhood and kinship and education in the same school and ventures on those fields, which no one has attained but only the fortunate and highly esteemed among kings. And we have shared with the Arab in his pride and with the Khorasāny in his glory and with the Banawy in his excellence. Then we attained a peculiar distinction in that, wherein they did not take part with us, and wherein they did not anticipate us. And," say they, "we are most like the subject population and nearest the characters of the multitude; and they are most at home with us, and rely most upon us, and desire most to meet us: and we are most compassionate towards them and most sympathetic, and we most nearly resemble them. And who is more worthy of choice and more fitted for

¹ Abu Muslim was entrusted by Ibrahim the Imām with the Abbāsīd propaganda. He spread the conspiracy in Khorasān and started the rebellion. Abu Salama, a client of the B. Ḥāritha b. Ka'b, was the first Wazīr of the first 'Abbāsīd Khalīf Saifāh.

² Some of these naqibs again are mentioned in the list of Tabary (ii, 1358).

preference than he who possesses these qualities and in whom these characteristics are found?"

The Case for the Abna

And you said: "He mentioned also that the Banaway said: 'As for me, Khorasān is the root of my lineage; and it is the origin of the royal family and the rising point of its propaganda; and from it this horn arose, this title sprang, this stream gushed forth, and this sea became wide, until the right was established and covered the horizon with its light, and brought healing from the ancient sickness and recovery from the incurable complaint and wealth from poverty and sight from blindness. And my branch is Baghdad; and that is the abode of the Khalif and rest after change; and in it are the remnant of the men of the propaganda and the sons of the party of the Prophet's family. And it is the Khorasān of 'Irāq, and the home of the Khalifate and the place of the material resources. And I am more firmly rooted in this government than my father, and more strongly attached¹ to it than my grandfather, and truer in my loyalty than the client and the Arab. And we have besides, as cannot be denied, patience under the shade of the short swords and the long spears. And our warriors know how to grasp the necks of their foes, when the spears are shattered and the swords are broken. And we know how to stab with the knife and to meet [16] the dagger with our eyes. And we are the defenders of those who are surrounded and the sons of danger, and we are they that stand fast in the charge and show knowledge when tried. And we wear the bordered garments and the decorations of the forces and the ornament of the armies, and such as walk with the spear and ride between the lines; and we are

¹ Emend تردد for توددا.

the men of force and valour; moreover, we know how to scale the walls of cities and how to make a breach in them, and how to rush madly on to the blades of swords and the points of lances, and to shatter rocks and break spears in pieces. We are patient when wounded and when we have to drag along our armour under conditions which would cause the heart of the Arab to quake and the spirit of the Khorasāny to fail. Then, too, we are patient under punishment; when we are interrogated we can adduce arguments. We have concentration of mind and clearness of eyesight; we are steadfast and unmoved by the rope between the two torture-planks! And we are little inclined to submit to adversity and to give way when visitors are importunate and relatives and friends discard us. We know how to fight at the entrances of ditches and at the tops of bridges. We love¹ red death at the gates of the tunnel. We know how to repel the foe in a narrow pass, and how to endure battle in prison. Ask the Khulaydia about this, and the Katafia and the Bilālia and the Kharbia.² And we are doers of wondrous deeds and masters of nightly attacks, and know how to kill the people openly in the markets and streets. And we unite the charge and the steady combat. And we have long lances when we go on foot and short spears when we ride. And if we go into ambush we deal deadly decisive blows and are a deadly poison. Each one of us is equal to the commander of an army. We fight as bravely by night as by day, and in the water as on the land, and in the country as in the camp. We are most fearless and hardy; we infest the roads more than any and penetrate the frontiers, with beauty of stature and fineness of form and long beards and good turbans and strong souls. We are men of daring and generosity, of

¹ Emend نَجْم for نَجْم.

² Khulaydia, etc. I have not succeeded in identifying these references.

writing and literature, of law and tradition. And ours is Baghdad altogether; it is quiet [17] when we are quiet, and in motion when we are in motion. And on it depends the whole world¹; and to its sentiment the world becomes conformed, so that its authority and power being such the whole world follows its lead. As the people of Baghdad, so are the people of the world; if Baghdad is turbulent and profligate, so is the world. Furthermore, we are the foster-brothers of the Khalifs and the neighbours of the Wazirs. We were born in the courts of our kings, and under the wings of our Khalifs. We have received education from them, and we have imitated their manners. And we know none beside them. And we are not called after any but them. And no one who aspired to their sovereignty was ever emboldened against us, nor of those who were prepared to oppose them. So who more deserves preference, and to whom is high station more justly due than to men possessed of such character and disposition?"

LIST OF SOME UNCOMMON WORDS OCCURRING IN LETTER I

Page in Cairene edition.	Word.	Meaning.
11	بازفکند	Epaulette.
11	(کافرکوبات	Kinds of axe.
11	طبرزینات	
12	دابوق	A game.
12	طباطبة	Polo stick.
12	برجاس	Target.
16	عقّابان	Two torture planks.

¹ Cf. the saying, "He who has not seen Baghdad has not seen the world." Qatṭū-'I-Qulab, p. 249.

him as noble as they are in disposition, and as proud and as vigorous to the utmost point of Arabic nobility and excellence and dignity and pre-eminence. And God made that a proof of his apostleship and token of his prophetic mission. And he had the best of rights to be reckoned an Arab, and the highest claim to the honour of that noble race. And just as Blessed Abraham was reckoned the father of those whom he did not beget, so the Banawy is a Khorasāny by descent, and the client is an Arab in respect of legal status and blood-money. And if we had been aware of the fact that Zayd was only the illegitimate son of 'Amr, we should have refused to acknowledge him as the son of 'Amr, although we were quite sure that Zayd and no one else was his natural father. And as the Blessed Prophet constituted his wives the mothers of the Faithful, although they did not bear them or give them suck—and according to some readings his wives are their mothers and he is their father, as he said, "the religion of Abraham your father"—(so the Banawy is a Khorasāny and the client an Arab). And the wet-nurse and the stepmother acquire the status of mother; and the foster-father and the uncle that of father in the Book of God; for they are His servants and have to do as He pleases. And the Lord is able to make of His servants an Arab or a non-Arab, a Qurayshite or a negro, as He wills; just as He is able to make human beings male or female or hermaphrodite, according to His will; and if He wills, He is able to take them out of any of those three classes and make them not-male, not-female, not-hermaphrodite. And so He created the angels, the noblest before God [20] of the whole creation. And He created Adam without assigning to him father or mother, but formed Him of clay and ascribed him to it; and Eve of the rib of Adam, and made her his wife and helpmeet. And He created 'Īsā without a male parent, and traced his descent from his mother, from whom He had created

him. And He created the Jinns from the scorching fire, and Adam from clay, and 'Īsā without a male parent, and the heaven from smoke, and the earth from water, and Ishāq from a barren woman: and He gave the power of speech to 'Īsā in the cradle, and He enabled Yahyā to speak prophecy as a child, and He taught Sulaymān the language of birds and the speech of ants; and He taught the Recording Angels all languages, so that they could write in any script and speak any language; and He gave speech to the wolf of Uhbān b. Aws.¹ And the Faithful of all nations on entering Paradise, and likewise their children and those possessed, will converse in the language of Paradise the hour they enter it, without being taught to speak it, or inspired or prepared for a long time, or instructed. And why should the ignorant be amazed at Ismā'il's acquirement of the Arabic speech without any instruction from fathers or teaching from nurses? And this question is often put by a member of the Qaḥṭāny clan, who is ignorant about it, to a 'Adnāny; and it presses more hardly on the Qaḥṭāny. And the 'Adnāny's answer runs easily, comes out quickly, and is plausible, to the effect that the B. Qaḥṭān makes no claim that Qaḥṭān was a prophet, so that God should give him a miraculous power of speech.² And as for the way in which God Almighty disposed of the people in that respect, it is the same as what He did with the clay of the earth in making some of it gold and some of it copper and some of it lead and some of it bronze and some of it iron and some of it dust and some of it potter's clay, and likewise sulphate of iron and red clay and arsenic and litharge and brimstone and sandaric and oxide of

¹ Mentioned in the *Dictionary of the Contemporaries of the Prophet*. He was pasturing sheep near Medina, when a wolf approached and attacked one of the sheep. Uhbān shouted to scare away the wolf, and the wolf sat upon its tail and spoke to him. A variant account attributed this story to another Uhbān.

² 'Adnān was a prophet. Hence it is not surprising that God should have taught him a supernatural language like Arabic.

zinc and salts of ammonia and marcassite and magnet, and who can [21] enumerate the varieties of precious stones of the earth and the varieties of minerals? And if my account of the matter is correct, then the Banawy is a Khorasāny and if the Khorasāny is a client, and the client is an Arab, then the Khorasāny and the Banawy and the client and the Arab all come to be a single class. And that is tantamount to saying that the points of agreement between them preponderate over the points of difference. In fact, in importance and dignity and lineage they are on the same footing; so the Turks are Khorasānys and clients of the Khalifs, strictly speaking; and the dignity of the Turks is credited to the whole community, and their honour enhances that of the whole community. And if all of the forces knew this, their pride would have abated, and their ill-feeling would have vanished, and their hatred would have departed. The cause of grievance would have been abolished, and nothing would have remained but that mutual rivalry and emulation which invariably remains between those connected by kinship, business, and neighbourhood. Moreover, mutual assistance and good feeling among relatives and connexions and associates is more far-reaching and common than bickering and dissension. And in the desire for mutual protection and the need for mutual defence certain particular clans of the Badawin join together in forming and quitting their encampments. And those who abandon their comrades are in a minority, and those who help their cousins are in a majority. And those who are content with their neighbours' prosperity and desire it to continue and increase are more numerous than those who desire it to be endangered, and endeavour to bring about its interruption and cessation. And there is no doubt that in the weakening of one's neighbour through rivalry and sedition one sinks from greatness to obscurity; and the world will never be quite pure and

free from corruption and disaster till all [22] differences vanish and its inhabitants meet with equal treatment, and its folk are able to realize their longings; for such a condition belongs to the heaven of reward, not to the earth of toil.

UNCOMMON WORDS OCCURRING IN LETTER II

Page in Cairene edition.	Word.	Meaning.
	زرنيج	Arsenic.
20	ميرك	Litharge.
	غار	Sandaric.

LETTER III

In the Name of God the Compassionate, the Merciful.

This is a letter which I wrote in the days of Al-Mu'tasim billah (may he prosper in the favour of God), but it never reached him for certain causes, which it would take too long to explain, and therefore I have not taken the trouble to indicate. I wished my writing to be moderate in character and just in mode, and not to be marred by indiscriminate praise of some and indiscriminate abuse of others. For a book of that sort has a large element of falsehood and exaggeration, being founded on prejudice; and its sentiments are the utterance of antipathy or favouritism. And eulogy is most advantageous to him that utters it, and profitable to him upon whom it is bestowed, and most lasting in its effects, and pleasantest to remember, if it is true and accords with the obvious circumstances of him to whom it is addressed and fits them, so that the person who is expressing and describing merely points to and calls attention to the object of his description. And in my opinion, if it is not possible to mention the virtues of the Turks without also

mentioning the vices of all the other contingents, then it is better to refrain from mentioning any of them, and more prudent to desist from composing this book. And a laudatory reference to many of these tribes would not compensate for a little depreciatory reference to some of them. For paying compliments to the majority is a work of supererogation, whereas attacking the few is of the nature of transgression of duty. And a little keeping of the law is more profitable to us than a great deal of self-imposed additional piety. And all people have a certain number of faults and a certain amount of blemishes; the superiority of one over the other consists in a greater number of virtues and a smaller number of faults. For, indeed, the possession of every virtue and freedom from every defect, great and small, manifest and unseen, this is an impossible ideal. As Nābig̃ha says [23]¹:

"You do not spare the friend in whom you correct no irregularity; what man is there who is free from fault?"

And Harīsh al-Sa'dy says:

"I have a friend whose friendship is like the days of my life, whose vicissitudes assume different colours towards me. If there is one quality in him that calls forth my censure and aversion, there is another quality which appeals to me, and against which I have nothing to say."

And Bashshār says:

"If you go on finding fault with your friend about everything you will never meet anybody that you will

¹ Of the poets quoted here three are mentioned in Guidi's Index to the *Aghāny*. Nābig̃ha is probably N. al-Dhubyāny, the famous poet of the court of Ghassān. Another Nābig̃ha is mentioned as having met the Prophet. A third, less eminent, was a poet in the time of the Umayyads. Bashshār composed satires against Manṣūr and Abu Muslim and Jarir. Muṭi' b. Iyās belonged to the time of the last Umayyads and the first 'Abbāsids. Harīsh al-Sa'dy is mentioned in Yaqūt's *Geographical Dictionary*.

not find fault with. So either live alone or associate with your brother on the understanding that he may sometimes commit a fault and sometimes avoid one. If you refuse to drink water with dust on it you must needs be thirsty. And what folk are always limpid to drink?"

And Muṭī' b. Iyās al-Laythy says:

"If you will only have as a friend one whose shoe never all his life slips you will not find him, however hard you try. And where is he whose like is not to be found? I have as my friend the man who forgives a fault and is content."

And Muḥammad b. Sa'id, a soldier, says:

"I shall thank 'Amr, if my death be delayed, for favours which are not grudged, however great they may be. He being a man, whose wealth is not hidden from his friend, and who makes no complaint when the shoe has slipped, saw my need, though hidden: and it was a mote in his eye until that need was removed."

[24] And if diverse persons of the mixed multitude and critics from the mass of society see that that is a necessary part of morality and advantageous in life and businesslike, living as they do in a world in which right and wrong are combined, and weakness is varied with strength, then we may be sure about the chief Imām and the most excellent ruler, with his high birth and exalted character and perfection in kindness and knowledge and high standard of fortitude and resolution, with his ability and strength and excellence and nobility and the particular qualities of Divine guidance and immunity and help and effectual assistance, we may be sure, I say, that God Most High would not have given him the distinction of the Khalifate and granted him the crown of the Imāmate and the highest and most satisfying favours and the most excellent and honourable nobility, and then made it the same thing to obey or disobey him as to obey or disobey

God, if He had not also granted him to use mercy and forgiveness, where they are appropriate, and to feign inadvertence to an extent impossible for anyone else, however excellent or kindly. And we will now say, premising this, "There is no power or strength but in God the Highly Exalted," in what has reached us regarding the Turks as follows.

It was said by Muḥammad b. al-Jahm and Thumāma b. Ashras¹ and Al-Qāsim b. Sayyār among an assembly of visitors to the house of the Khalif, that is the further audience chamber, as follows.² Whilst Ḥumayd b. 'Abdulḥamīd was sitting there and with him Yakhshād al-Ṣughdy and Abu Shujā' Shabīb b. Bakhār-Khudā of Balkh and Yahya b. Mu'ādh and men accounted proficient in the science of war, well tried of high rank, long versed in the endurance of the hard life of a soldier, a messenger from Al-Ma'mūn came forth, and said to them: "The Commander of the Faithful says to you severally and jointly, that you are to write each one of you his opinion, stating the grounds of it, as to whether you would rather, each commander among you, if he had about him a number of trusty followers, that you should have to meet a hundred Turks or a hundred Khawārij." And altogether they said: [25] "We would rather meet a hundred Turks than a hundred Khawārij." But Ḥumayd said nothing. Then when they had finished giving their

¹ Muḥammad b. al-Jahm was a poet of the time of Ma'mūn. For the sect of the Jahmites see p. 693, n. 1. Thumāma b. Ashras is classified by Shahrastānī like Jahīz himself among the Mu'tazilites. He was an authority of Ṭabary imprisoned by Rashīd. Qāsim b. Sayyār is mentioned in the *Fihrist* (p. 164, l. 24) as a secretary of state. Ḥumayd b. 'Abdulḥamīd was a general of Ma'mūn, who besieged Baghdad in 202 A.H., when that city seceded to Ibrāhīm al-Mahdy. Yahya b. Mu'ādh was sent by Rashīd to suppress a rebellion in Syria in 191 A.H. The other two persons named here appear to be otherwise unknown.

² The *دار العامة* or public reception-room as distinguished from the *دار الخاصة* for grantees. Cf. Ṭabary on *Mukhtadir* in Kosegarten, *Chr. Ar.* 107, ll. 4, 14.

reasons, the messenger said to Humayd: "The company have given their opinion; now do you give yours and write it, so that there may be something to be urged for you or against you." He said: "I would rather meet a hundred Khawārij; for I have found that the qualities in which the Khārijy excels the whole fighting force are not brought to perfection in the Khārijy as they are in the Turk; for the Turk excels the Khārijy as much as the Khārijy excels the rest of the fighting force. Then the Turk is distinguished from the Khārijy by the possession of virtues which the Khārijy can make no claim to possess. Moreover, these strong points in the Turk as compared with the Khārijy make him a finer and more efficient soldier than he is by virtue of those other qualities which he and the Khārijy more or less share."

Then Humayd said: "The strong point in which the Khawārij surpass the rest is their steady vehemence at the outset, the impetus by which they attain their objective and procure what they hope for. Secondly, they endure long night journeys patiently in the saddle, so that the population of the district they attack do not notice them; then they make a sudden attack on them, and rout them, and leave them like meat drying on the planks, and then off they hurry out of their sight, before they can recover their breath, at such a rate, their victims would never suppose it possible to traverse so great a distance in so short a time. Thirdly, the Khawārij are popularly reputed to overtake those whom they pursue and to outstrip those who pursue them. Fourthly, their baggage is light and their provisions are few, they lead the horses and ride mules. And if need require, they migrate in a night [26] from one country to another. And they are people who, when they set out on a campaign, do not leave great wealth behind them nor tree-clad orchards nor plastered houses nor estates nor plantations nor buxom maidservants. They have nothing to be plundered and

have nothing valuable with them, so that the troops should be anxious to engage them in battle. They are just like the birds, that make no store nor are anxious for the morrow; in every land they can get water and food for their sustenance. And if they do not find it in one country, their wings make distance of no account to them and rough ground as easy as smooth. So with the Khawārij. They have no difficulty in getting food and provender; and if they should find it difficult, then their camels and mules and horses, the lightness of their equipment, and their capacity for riding long in the saddle make it easy for them to get something to eat and to replenish their supplies. And fifthly, if the kings send a number of troops against them, to match them in force and equipment and military capacity, they cannot do so; for a hundred regular troops are no match for a hundred Khawārij. And if they strengthen their forces and double the number of them, they are too heavily equipped to pursue them, or to escape if pursued by them. And if the Khārijy wishes to approach to skirmish with their outposts or surprise their force or plunder them, he does so relying on his chance of seizing the opportunity and finding out the weak point and being able to get off, if there is any danger. And if he wishes he makes a surprise attack, so as to put them in disorder or cut them off in detail. These," said Humayd, "are their exploits, these are the qualities, which make commanders hate to encounter them."

And Qāsim b. Sayyār said: "And there is yet another quality, which puts fear into the heart and undoes it, and weakens resolution and corrupts it [27]. It is, that the armies and national troops hear the comparisons that the people make of the Khawārij. For instance, the verse—

‘ If the stingy, niggardly in hospitality, sees his guest, he is
to him like the armed Azraq.’¹

¹ The Azāriq were a sect of Khawārij named from the founder Abu Rāshid Nāfi' b. al-Azraq. He went from Basra to Persia and Kirmān

And again—

'Many a friend's heart changes from loyalty, just as the sword blunts in the hand of a heretic.'

And again—

'Lions are easier to meet than he is, when the cry of the Khārijy keeps off sleep at eventide.'"¹

After these further remarks of Qāsim b. Sayyār, Humayd continued as follows: "In the first onset the Turks are preferable, more concentrated, more prudent. For the Turk, being sure in his onset and firm in his purpose and single-minded and not distracted, has accustomed his beast not to swerve aside, and if he makes it swerve aside, to run for all it is worth in the direction he intends time and again; otherwise he does not leave his course or stop its galloping. And his one desire is to break it of caprice, and from being overwhelmed with panic after a bold beginning owing to the terror of meeting the foe and love of life. For when he knows that he has trained his beast to such a pitch as not to swerve and only to consent to move freely with him to perform some dangerous manœuvre between the ranks, he does not begin the attack till he knows exactly what he is about and has found a weak spot. And his one aim is to make himself like a beast driven into a corner, which if it has chosen to fight does not abandon its struggle or relax its strength, but puts away all thoughts of flight and inclination to withdraw.

in the time of 'Abdullah b. al-Zubayr. They said that 'Aly was an unbeliever and that b. Muljam was blessed in Qur. Sur. ii, 203. They killed the wives and children of those who did not accept their tenets. Cf. Letter I above, p. 646, n. 1. An account of them is to be found in Shahrastāny and b. Hāzm.

¹ تحكيم. This is a reference to the principle of the Khawārij, first formulated at the battle of Siffin, that the decision belongs to God alone, not to arbitrators like 'Abdullah b. 'Abbās appointed by 'Aly.

"And the Khārijy relies upon his lances, but the Turks are as good with their lances as the Khawārij; and if a thousand Turkish horsemen charge and discharge a thousand arrows [28] all at once, they prostrate a thousand men; and there is no other army which can charge as well. The Khawārij and Badawin, however, are of little account, as far as the department of mounted archers goes. But the Turk can shoot beasts and birds, targets on spears and human beings, quarry crouching on the ground, figures set up and birds on the wing. And while he shoots, he will let his beast go at full gallop backwards or forwards, right or left, up or down hill. And he can shoot ten arrows before the Khārijy can put one arrow on his bow-string. And he can ride his horse with a downward sweep from a mountain or down below inside a ravine at a greater speed than a Khārijy can accomplish on level ground. And the Turk has four eyes, two in front and two at the back of his head. The Khārijy fails in following up a war, the Khorasāny in beginning it; and the failure of the Khorasāny troops is as follows: they charge at the beginning of the engagement, and if they are repulsed (lit. retrace their steps) they take to flight, and often they return to the fray, and that only when the hazard of the engagement is over and the foe are no longer keen on the conflict. But if the Khawārij retreat, they retreat for good, and never think of returning to the fray after retreat, save on a very few occasions. As for the Turks, they do not wheel like the Khorasānys; and if they do turn their backs, they are to be feared as much as deadly poison and sudden death; for their arrows hit the mark as much when they are retreating as when they are advancing. And one cannot be sure of not being caught by their lasso or having one's horses caught and their riders seized in the same motion. And in the whole of history none have escaped their lasso save Al-Muhallab b. Abu Šufra and

Al-Huraysh b. Hilāl and 'Abbād b. al-Ḥuṣayn.¹ And sometimes they cast their lasso with some other design; and if they do not take their victim with them, he is made to think [29] in his ignorance that it is only the stupidity of the Turk and his own sagacity.

"Again, they have taught their horsemen to carry two or three bows and strings to match them. And the Turk has with him on his raid all that he needs for himself, his armour, his beast, and the harness of his beast. And his patience for continuing in the saddle and for going on without stopping and for long night journeys and for crossing a country is most remarkable. And for one thing the horses of the Khawārij have not the staying capacity of those of the Turks. The Khārijy is not good at tending his horse, possessing only the knowledge of an average horseman in this respect. The Turk is most skilled in veterinary science and knows exactly how to make his horse fit for the work he wants to get out of it by breaking it in, having bred it and reared it himself as a foal; it follows him if he calls it, and it trots behind him if he is riding. He has trained it in these respects so thoroughly that the horse knows him as well as it understands 'Ajdam', or the camel and the mule and the ass understands the cries by which they are ordinarily addressed, as well as a madman understands his nickname or a child his real name. And supposing at the end of a Turk's life one were to number his days, it would be found that he had spent longer time sitting upon his beast than he had spent sitting upon the earth. The Turk rides a stallion or a mare, and goes forth on

¹ Al-Muhallab b. Abu Ṣufra is frequently mentioned in the *Kāmil* of Mubarrad. Shahrastānī mentions that he fought the Azāriq for nineteen years till the time of Al-Ḥajjāj. Huraysh b. Hilāl is mentioned in connexion with Muhallab in the *Kāmil* of Mubarrad (ed. Wright, pp. 630, 631) as fighting against the Khawārij. The same author (p. 136, l. 18) says of 'Abbād that he was accounted by Muhallab his bravest officer.

a peaceful or a warlike expedition, far in pursuit of game or for any other reason, with his mare and her colts following. If he cannot hunt human beings, he hunts wild beasts; and if he cannot get them and wants something to eat, he bleeds one of his beasts; and if he is thirsty he milks one of his mares; and if he lets one of them rest, he changes to another without dismounting. And there is no one else but is injured by a merely meat diet; and his beast in like manner is satisfied with herbs and grass and trees without being shaded from the sun or protected against the cold [30]. And as for patience in the saddle, if the frontiersman and the postal service men and the eunuchs¹ and the Khawārij united their prowess in a single individual, they would not yet attain to the standard of a single Turk. And the Turk keeps with him to the end of his journey only the thoroughbreds among his horses. And the horse, which the Turk kills by wearing it out and will not take for his raiding expedition, is such as the Khārijy horse cannot keep up with and any beast from Tokhāristān cannot accompany for long. And if he were to accompany a Khārijy, he would have to exhaust his efforts, before the Khārijy horse had lost its first freshness. And the Turk is groom and horseman, and trainer and seller of horses and veterinary surgeon and rider. And one single Turk is as good as a whole staff. And if a Turk is advancing along with an army composed of some other contingent, where the rest go 10 miles he goes 20; for he goes off alone to right and left of the troop climbing the tops of the hills and descending to the lowest points of the valleys in search of game; and in doing this he shoots at everything that creeps or runs or flies or falls.

“And again, the Turk does not march like other people at all, and does not proceed at all in a straight line. And

¹ The Eunuchs are mentioned in the *Zoology of Jāhiz* as fierce enemies of Byzantium.

further, if the morning march is long and the journey is fatiguing and the halting-place is far and the day is half spent, and the men are very tired and distracted with weariness, and the comrades in the expedition are silent altogether, having such hard work as to be quite averse from conversation, and everything is cracked with the intense heat or frozen with the intense cold, and the hardest person to endure long night journeys wishes that the earth could contract, and each time he sees a phantom or a token congratulates himself that he has come to the halting-place, and when the rider has come to it he dismounts, his legs apart as though he were suffering from a disease, groaning like a sick man, and consoling himself with groaning, and recovering himself by stretching his legs and lying down; in such circumstances as these the Turk, after going twice as far as the rest, though his shoulders are dead tired by constantly stretching them out, on seeing close by a wild ass or gazelle, or if they come in his way [31] a fox or hare, he rides at the end of his journey as well as he did at the beginning, so that you would never think that that was the man who had been doing that long and fatiguing march. And if the people have come to a gorge, along which they throng, or along a bridge, he claps his legs to his horse's belly and clears it; then he appears on the other side like a star at its rising. If they have reached a steep mountain side, he leaves the path and climbs up the mountain. Then he descends at a place too sheer to afford footing to an antelope; and you would think he was risking his life from what you see of his position; and if he were really risking his life all through, he would not have passed safely through such adventures repeatedly.

"The Khārijy prides himself on overtaking those whom he pursues, and not being overtaken when he is pursued. The Turk does not need to escape, because he is never pursued, nor does one attempt it. And who is there that

desires to obtain the impossible? Moreover, it is well-known that the standing feature of Khārijy prowess is their agreement in religion, and their conviction that fighting is religion; just as when we find the Sijistāny and the Jazary and the Yemāny and the Maghriby and the 'Umāny, and among them the Azraqy and the Nejdy¹ and the Ibādy and the Šufry and the Client and the Badawy and the non-Arab and the Arab and the slaves and the women and weavers and the husbandmen²—when we find all these fighting, various as their origins and localities, then we know that it is religion that brings them together in harmony for that purpose, in the same way as every cupper³ on earth is sure to be fond of wine, of whatever race or land he be, and rag-dealers and fishmongers, slave-dealers and weavers in every land and of every race are the worst of God's creatures in trade and business, and we may thus know that such a character goes with such a trade and such a disposition with such a business, in so far as they develop on those lines all over the world. But we find that in their country the Turk does not fight for religion nor for interpretation of Scripture nor for sovereignty nor for taxes nor for patriotism nor for jealousy—unless his women are concerned—nor for defence of the home nor [32] for wealth, but only for plunder, the choice being in his hand; and he fears no threat if he flees, hopes for no

¹ Emend نجدى as in Van Vloten's edition for ندى.

² This list is based on a cross division. The classes are partly geographical (Sijistāny, Jazary, Yemāny, Maghriby, 'Umāny, and Nejdy). Others are sects of the Khawārij (Azraqy, Ibādy, Šufry). Others are based on social and political distinctions. Further information about the Khawārij is contained in Shahrastāny and b. Ḥazm. The latter speaks of Khawārij in Andalusia. For the Azāriq see note, p. 664. above. The Ibādys still exist as a sect of 'Umān and French Africa. They were the followers of 'Abd Allah b. Ibād, and appear in history from about A.H. 60 onwards. They were the moderate party among the Khawārij. For the Šufrys see b. Ḥazm, pp. 190, 191, vol. iv.

³ It is clear from Ḥarīry, Maq. 47, that cuppers had a bad reputation.

promise if he behave gallantly. And such they are in their homes and in their forays and wars. And he is the pursuer, not the pursued. And a man such as that uses the superfluity of his strength, and has no need to exert himself. Moreover, nothing can withstand him, and none desires to oppose him. And what would you expect of such a man if he were constrained by hard circumstances or sense of honour or wrath or devoutness, or if anything occurred to him that is wont to occasion defensive war?

"The lance of the Khārijy is long and penetrating, that of the Turk is short and hollow. The short hollow weapons are more deadly in effect and lighter to carry. The non-Arabs use the long lances for infantry, and such lances are employed by the Abnā in the entrance of trenches and defiles. The Abnā do not compete with the Turks and Khorasānys in this respect. For the practice of the Abnā is lancing in trenches and defiles. And the Turks and Khorasānys are cavalry and mounted troops. And it is on cavalry and mounted troops that armies depend when they have to charge and retreat. And the horsemen can compress an army like a roll of papyrus,¹ or part it as the hair is parted. And the ambush and the skirmishers and the vanguard consist of none but their picked men, namely, the heroes of renowned engagements and great wars and famous victories. The troops of horse and squadrons consist only of such as these. From them are chosen the standard-bearers and banner-men, and drummers and those who wear coats of mail and bells. Dust and the neighing of horses is their element; they are used to chiding horses, to the rustle of the wind in their garments, to weapons, to the fall of the horse's hoof, to overtaking when they pursue, to escaping when they are pursued. And the Blessed Prophet, in appointing a double share to mounted men in battle and only one share to infantry, showed that he thought mounted men

¹ Cf. Qur. xxi, 104.

did double in the way of slaughter and conquest and plunder and taking of spoil.

"Assuredly the Abnā can fight exceptionally well in streets and prisons (clefts?), [33] and in trenches and defiles. But infantry are always inferior, and ought to be subject to control and command. And their commander is himself mounted; and the commander of the cavalry must of necessity be mounted. And he that has grown accustomed to lancing and smiting and shooting on horseback, if compelled to do these things on foot, is better at protecting himself and his friends than a foot-soldier would be if he wanted to use his weapons on horseback, apart from the frequency with which they have to dismount and fight. The poet says:

'You could not dismount; but we dismounted. The true warrior is he that understands how to dismount.'

And Al-Dabby¹ said: 'What is the use of my riding, if I do not dismount?' And another says: 'Many a grappler and dismounter!' And (continued Humayd): The only people on earth that has not suffered from divided responsibility in war is the Turkish people. Indeed, they avoid doing this; for the objectionable result of divided command is secret rivalry, mutual jealousy, and shirking responsibility. And when the Turks are drawn up in battle array, if there is a weak spot in the people opposing them they are all quick to note it and perceive it; and if there is no weak spot and there is nothing worth attacking in the enemy, and the Turks are in favour of departure, then the whole Turkish army are agreed on that point and see the justice of it, and with one steady mind and purpose they set about doing it all together. They are not addicted to quibbles or self-laudation or rivalry in poetic display. But their one concern is to accomplish the business they have in hand;

¹ Usually the reference is to the grammarian Mufaddal al-Dabby, who collected the Mufaddaliyat. He was probably earlier than Jāhiz, being a contemporary of Maḥdy, *circa* 180.

and differences among them are reduced to a minimum. The Persians were wont to taunt the Arabs when they went out with divided command, as follows: 'Partnership in war, in a wife, and in command comes to the same thing.' And what is your opinion about a people who can be under divided command without being the worse for it? And how will they be if they unite?"¹

When this speech was reported to Al-Ma'mūn he said [34]: "The Turks need no one to state the case for them after Humayd. He has had experience of both parties. He is a Khorasāny and an Arab. It is impossible to doubt his sincerity." The incident was reported to Tāhir b. al-Husayn,² "of the two right hands." And he observed: "How well Humayd has put the case! He has neither depreciated nor exaggerated." This, then, is the opinion of the Khalif al-Ma'mūn on the decision of Humayd; and this is how Tāhir approved of it.

I was informed by a Khorasāny or Sadusite³ that he had heard Abu'l-Baṭṭay⁴ say as follows: "What, alas! can I do with cavalry that gallop up and down hill in the dried-up watercourse, and can do on horseback what a dancer of Ubulla⁵ cannot do on the ground?"

And Sa'id b. 'Uqba b. Salm al-Hanā'y, a man skilled in the art of war, like his father, said as follows: "The difference between us and the Turks is that the Turks hitherto have never raided any people whatever nor fought a pitched battle nor attacked a foe, be they Arabs or foreigners, while sending an equal number to face them; and their one object is to secure themselves against their malice and mischief and compel them to abandon their enmity; and if they refuse to be reconciled, but are

¹ Emend تحاسدوا for تحاسدوا.

² Associated with Ma'mūn in his quarrel with Amīn.

³ An Arab tribe.

⁴ Abu'l-Baṭṭay was associated in command with Humayd b. 'Abd alḥamīd in 201 A.H.

⁵ A city on the Tigris not far from Baṣra.

bent on war, then the guiding principle of their whole policy is to protect themselves and to occupy strong positions and to be on their guard against their opponents. That they should aspire or set their hearts upon tricking them and trying to inveigle them, it never enters into the minds of their foes that they should have any such intention. And you surely know their tactics whereby they enter cities through impregnable walls, and their skill in fording the River Balkh." This is that Sa'id who said: "If you are making war and there are only three of you, put one in reserve and another in ambush." And many other dicta on war are attributed to him besides.

He said: "My father told me he had heard Abu'l-Khaṭṭāb Yazīd b. Qutāda b. Du'āma, the lawyer, repeat a saying of 'Umar b. al-Khaṭṭāb of blessed memory about the Turks to the following effect: 'They are a foe hard to pursue, yielding scant spoil' [35]. And a man of the Nejd said: 'Umar Abu Zubayd al-Tā'y¹ forbade a description to be given of a lion, because it was the sort of thing that increased the fear of the coward and the terror of the mind, diminishing the readiness of the hero. And what Abu Zubayd said of the lion is still more true of the Turk.'"

And Sa'id said in conversation at that time: "A Turkish contingent had crossed the country of Abu Khuzayma (that is to say, Ḥamza b. Adrak, the Khārījī) and the confines of Khorasān for some purpose. And Ḥamza was with the bulk of his troops. And he said to his companions: 'Let them move freely so long as they leave you alone. And do not oppose them. For it has been said: "Keep off their tracks so long as they keep off your tracks."' " This is what Sa'id b. 'Uqba² said and advised and related. And he was an Arab of Khorasān.

¹ Abu Zubayd al-Tā'y is mentioned in the *Kāmil* of Mubarrad, 298, l. 10.

² Cf. *Aghāny*, x, 195, 107; xviii, 205.

And Yazid b. Mazyad mentioned the encounter in which the Turk Dūlabā killed Al-Walid b. Ṭarīf, the Khārījī.¹ And he said in one of his discourses relating to the Turks: "The Turk's body has no weight on the back of his horse; and if he walk on the ground his feet make no sound. And he can actually see behind his back what one of our horsemen could not see before his face. And he looks on one of our horsemen as prey and regards himself as a lynx; he regards him as a gazelle and himself as a hound. And verily if he were cast into the bottom of a well with his hands bound, even then his cunning would not desert him. And were it not that the lives of most of them are spent² near the mountain (i.e. the mountain of Holowān)³ and they chose to attack us, we should be long occupied with them." One of his companions versified as follows:—

"Suppose the world were brought to you as a gift; is it not sure at last to come to an end?"

The Turk would rather obtain a maintenance by violent means than a kingdom freely; he cannot enjoy his food at all unless he has got it by hunting or by plunder. And he is constantly on horseback,⁴ pursuer or pursued.

Moreover, it was said by Thumāma b. Ashras, who was as fond as Muḥammad b. al-Jahm of talking about the Turks: "The Turk only fears what is really worthy of fear and never covets save what is worth coveting. He is never induced to desist from pursuit by anything short of despair. He does not leave [36] a small quarry till he reaches a larger one; and if he can secure both, he is not content with only one of them. What he cannot do well

¹ Yazid b. Mazyad is mentioned in Guidi's Index to the *Aghāny* as belonging to the court of Hārūn al-Rashīd, and as being sent by him against Walid.

² Emend *تقتصر* for *تقتضي*.

³ In 'Iraq between Baghdad and Hamadān.

⁴ Emend *يقتل* for *يقتل*.

he cannot do at all. When he does a thing well you may be sure he understands it completely, and knows it inside out. He does not waste his energy in useless enterprises. He fears nothing for himself. If he did not need refreshment in sleep, he would never indulge in sleep; besides, when he is asleep he is half awake, and when he is supposed to be awake he never dozes. And if in their part of the world there had been prophets and wise men in their country, and they had happened to think of such things and had had leisure to attend to them, they would have made you forget the learning of Baṣra and the wisdom of Greece and the industry of China." Thumāma also said: "We were met on the Khorasān road by a Turk. We had with us an officer ready to risk himself and his men. And between us and the Turk there was a valley. The Turk challenged us to send one of our cavalry to meet him in single combat. And a champion was produced, as fine and thorough a soldier as I have ever seen, of splendid stature and physique; and the Turk managed to induce him to cross over to his side. They fought for a time. And we only supposed that our friend would be equal to managing his opponent. Meanwhile he was getting further away from us. So as they were thus engaged, the Turk retreated from him as though in flight. And when he did that, we thought our friend had got the better of him. The horseman followed him, sure as we thought of bringing us his head or bringing us the Turk himself tied to his horse. Then we saw nothing but that our comrade slipped from his horse and was separated from it. Then the Turk dismounted, spoiled him, and killed him. Then he overtook his horse and took it along with him. Then afterwards I saw the Turk taken prisoner to the house of Al-Faḍl b. Sahl.¹ And I said to him: 'How did you do that day, and how was it that you procrastinated with him, then he attacked you, then you retreated from him

¹ Al-Faḍl b. Sahl is associated with Ma'mūn (*Aghany*, iii, 49).

as if in flight, then killed him?' He replied: 'If I had wanted to kill him when he crossed over he would have died in single combat. But I manoeuvred so as to entice him away from his companions and get him to myself, with nothing to prevent me from taking his horse and his spoil.' And this is how he detached the mounted man from the rest of the company and deluded him just as he liked [37]. I have spent some time as a prisoner in their hands. And I have never seen anything like their generosity and fine presents and graciousness." This Thumāma b. Ashras was an Arab. And what he says about the Turks is above suspicion.

And I may tell you that I have seen something wonderful and surprising about them. I saw on one of the expeditions of Al-Ma'mūn two lines of cavalry on the two sides of the road near the house, a hundred Turks on the right side and a hundred of the other races on the left side. They were drawn up expecting the coming of Al-Ma'mūn. It was midday and very hot. And he came to them. And all the Turks were sitting on horseback except three or four. And all the mixed troops had thrown themselves down on the ground except three or four. And I said to a friend: "See what has happened to us." I can tell that Al-Mu'taṣim knew very well what was about when he made them into a corps and took them into his service.

Once I wanted to go to Al-Qātūl,¹ the holy city. And I was going forth from Baghdad and saw some horsemen of Khorasān and Abnā and other divisions of the army, a horse of whom had strayed, and they were in search of it mounted on blood beasts and not able to overtake it. And a Turk passed along, not a distinguished or influential man among his people, riding on a sorry jade, while they were on blood horses. And the stray horse

¹ On the Tigris.

came in his path ; and he was quick to circumvent it, and admonished it. And the whole force stood still and looked on. And one of them who had despised that Turk said : " This, by your father, is the way to venture and expose yourself. A horse has nonplussed them ; and they are the lions of the land. And this Turk, short as he is, and weak as is his beast, comes and wants to catch it." And he had not finished speaking when the Turk came up with the stray horse and gave it to its owners and went about his business, not expecting them to praise him or bless him. And he did not make out [38] that he had done anything remarkable or done them a favour.

The Turks know not how to flatter or coax, they know not how to practise hypocrisy or backbiting, pretence or slander, dishonesty or haughtiness on their acquaintance, or mischief on those that associate with them. They are strangers to heresy and not spoiled by caprice ; and they do not make property lawful by quibbles. Their fault which makes them most unpopular is their love of land and love of moving freely up and down the country and propensity for raiding and preoccupation with plunder, and the intensity of their attachment to it, besides their custom of dwelling on the experienced joy of successive victory, on the delight and frequency of their plunder, and their exploits in such deserts, and their return again and again to the same prairies ; and the fact that the excellence of their prowess does not become dulled from long-continued idleness, and that their courage is not exhausted by the course of time. And when one is skilled in any accomplishment he cannot be restrained from it ; and when one hates a thing, one escapes from it. And the reason why among non-Arabs they are so peculiarly patriotic is this, that in their constitution and in the component elements of their character, owing to the nature of their country, their soil, the similarity of their source, and the relationship of their tribes, there is

to be found what is unknown in the case of any other people. Do you not see that you may see a Baṣran and yet not be able to tell whether he is from Baṣra or Kufa, or a Meccan without being able to tell whether he is from Mecca or from Medina, or a Jabaly without being able to tell whether he is a Jabaly or a Khorasāny, or a Jazary without being able to tell whether he is a Jazary or a Syrian? But you are not likely to go wrong in the case of a Turk, and do not require to employ the arts of the tracker and the detective nor to ask him his nationality. Their women are as unmistakable as their men; and their beasts are as distinctive as they are themselves. Such is the peculiar stamp which God has set upon this country and assigned to this soil: just as He has gathered the families of the earth and propagated them to the limit of their power and the full term of their extension, in accordance with their resources and their natural endowments and the faculties which God Almighty has bestowed specially on them, so as to be distinguished by possessing them. And when they come to the world of reward, that will be in accordance with the words of the [39] Qur'ān: "We have created them such as they are."¹ And so you see the Arabs and Badawīn who have settled in Khorasān; and you do not distinguish between the man whose father settled in Farghāna² and the natives of that country, nor see any difference between them in their red moustaches nor their rough skin nor their large necks nor their national costume. In all these four respects you can find no difference between the descendants of the settlers and the old inhabitants.

Patriotism is common to all nations and prevails over all mankind. But it is peculiarly strong among the Turks, and counts for more among them owing to their mutual similarity and homogeneity of idiosyncrasy. Do you

¹ Qur'ān, Sura lvi, 34.

² North of Kashgar.

know the saying of Al-'Abdy,¹ "God makes cities prosper by patriotism?" And B. al-Zubayr² said: "There is nothing in people's lot that satisfies them more than their fatherland." And 'Umar b. al-Khaṭṭāb said: "If it had not been for the differences in the inclinations of men, God would never have caused the countries of the world to be inhabited." And Jum'a al-Iyādiā³ said: "If it had not been for God Almighty ordaining that His servants should traverse the world, the valleys would not have contained them, and no provision would have satisfied them."

Qutayba b. Muslim⁴ spoke of the Turks as follows: "They are verily more strongly attached to their country than the camels." For that animal yearns towards its native place, when (the camel) is in 'Umān, south of Baṣra, and tramples down anything that stands in its way and penetrates every valley, so as to reach its home, along a road it has only traversed once before, and keeps on smelling and sniffing and following the best indications that its peculiar nature has endowed it with, until it reaches its resting-place, when that is as far off as Baṣra from 'Umān. And that is why Qutayba used them as an illustration.

The jealous regard for country and yearning after it and love for it is mentioned in the Qur'ān and set down in its pages for all to read. But for the reasons that we have mentioned, patriotism among the Turks is stronger and more ardent. And another thing, in spite of their steadfast purpose and exhausted resources, which induces them to return home; and that is the fact that the Turks [40] dislike town life and to remain stationary for a long time with few changes and migrations; and the basis

¹ This name occurs in Guidi's Index and in the *Anedāb* of Sam'āny early in the history of tradition.

² For B. al-Zubayr see Guidi's Index.

³ For Jum'a al-Iyādiā see *Balaghut al-Nisā'* (ed. Cairo, 1908), p. 58.

⁴ Qutayba b. Muslim was sent to Khorasān in 30 A.H.

of their constitution is mobility, nor are they given to a sedentary life. Their mental qualities are superior to their physical; they are energetic, enthusiastic, busy, intelligent, quick-witted. Satiety they are wont to regard as impossible, long remaining in the same place as folly, rest as a bond, contentment as lack of energy. And they think that to abandon raids is demoralizing. In the same strain are sayings of the Arabs, that of 'Abd Allah b. Wahab al-Rāsibī,¹ "Love of ease produces weariness," and the proverb "He whose brain boils in the summer, his kettle boils in the winter". And it was said by Aktham b. Sayfī²: "I should not like to be insured against everything in the world." He was asked why. And he said: "I fear I might get used to helplessness." This is the explanation of the Turks' homesickness and patriotism. And what still more induces them to roam and makes them inclined to return and adverse to staying where they are, is the fact that their commanders do not know how strong they are, and are imperfectly informed of their value and their neglecting to rely upon them and profit by them; moreover, when they make them the reserve for their troops, the Turks are not content to be part of the tail or attendant rabble or makeweight of the force; they refuse to accept such a position, and say what they would rather do and hold, that injury is unseemly for them and obscurity is a degradation for them; they are more offended when anyone is ignorant of their claims than they are when anyone refuses to give them what they ask. And when they meet with a king who is considerate and well-informed about men's values, not inclined to bad habits, not capricious, who does not favour one country more than another, using tact in all his undertakings, establishing justice wherever

¹ 'Abd Allah b. Wahab al-Rāsibī is mentioned by Shahrastānī as a Harfī leader and an Imām among the Khawārij.

² See Guidi, Index.

he remains, then they remain in the position of those who understand their luck and deal uprightly and give up [41] their natural propensities and choose the truth and submit to parting from their country and accept the Imāmate rather than tyrannical lordship and prefer justice to custom.

Know, moreover, besides all this that I have mentioned, that every people and every generation, every tribe and family that you find excelling in arts and surpassing others in eloquence or higher in culture or political ability or military science, will only be found to have attained such a high pitch of excellence, because Almighty God has fitted them for that purpose and restricted them to that department by endowing them with just those qualities which would enable them to do so; for he who is divided in desire and of two opinions and double-minded is incompletely equipped for a particular thing and not prepared for it, will not be completely master of any one accomplishment that I have named and will fail to attain finality in it, such as the Chinese have attained in art, and the Greeks in philosophy and literature, and the Arabs in respect of which we shall speak in the proper place, and the Sasanids in empire, and the Turks in war. Do you not see that the Greeks, who have studied causes and effects, have not been good as merchants and in manual industry? Not good at sowing and tilling the land, at building houses, and at planting trees; not given to accumulate and hoard property, to coveting and exertion. Kings have been wont to give them leisure and appoint them rations, so that they studied concentration of soul and abundant power and mind at ease to the invention of tools and implements and toys to entertain the mind, and to give rest after labour and joy to heal the wound of anxiety. They have made a great number of useful things, and they have produced such valuable inventions as the Archimedian and other

balances and astrolabes and clocks and carpenters' squares and keyboards and compasses; such as different kinds of flutes and lyres, medicine, mathematics, engineering, music, war engines, catapults, ballistas [42], siege engines, Greek fire, and more besides that it would take too long to mention. And they have been devotees of learning, not craftsmen, making tools and planing instruments and forging models. They have not shone in the employment of implements, but have pointed out the way how to make them, while they have not touched it themselves; the bent of their genius being theoretical, not practical.

As to the Chinese, they are founders and forgers and moulders and smelters and dyers in wondrous wise, and joiners and sculptors and artists and weavers and scribes and skilled handicraftsmen in every line they undertake and practise, even if its substance were different and its manufacture dissimilar and its price varied. The Greeks know the theory, but do not concern themselves with the practice. The Chinese do concern themselves with the practice, but do not know the theory. For the one people is given to science, the other to industry.

The Arabs in like manner are not merchants or manufacturers or physicians or mathematicians or farmers; for they regard such pursuits as servile. Nor are they agriculturists, fearing the poll-tax.¹ They do not hoard, nor make money, nor "corner",² nor try to acquire what belongs to other people. They do not try to make

¹ The distinction between *jizyah*, poll-tax, and *kharaġ*, land-tax, belongs to a comparatively late time in the history of Islam. The papyri of the first century A.D. know only of *jizyah*, mainly as a land-tax. The development of the poll-tax is to be explained partly from conversion, partly from the acquisition of land by Moslems, partly from the enforcement of the poll-tax on monks. Eventually the theory was that all paid land-tax, while the tolerated sects also paid poll-tax. Cf. *Encyclopædia Britannica*, art. "Egypt (Moslem)".

² i.e. to keep for selling at a later date in expectation of a rise in price.

a living from the tongue of the balance or the heads of the measure;¹ they do not know small coins; they are not in that oppressive poverty which distracts from knowledge, nor acquire the wealth that produces idleness, or the opulence that causes heedlessness. Humiliation they will not endure at all; it would break their heart and damage their self-respect. They dwell in the desert and are reared in the waste; the deeps and the shallows are unknown to them. Foul breath, disagreeables, putrefaction, and indigestion are also unknown to them. Keen wits and unscrupulous minds are theirs. And in directing their power to the recital of poetry and eloquent speech and finesse [43] of language and inflection of words and tracking out men after tracking out footprints and the preservation of genealogies and finding out their way by the stars and inferring their course by tokens and determining the synchronisms of stars in rising and setting and the understanding of horses and armour and implements of war and remembering all that they have heard and interpreting all that they have perceived and distinguishing between merits and defects, they have reached the limit therein and attained every desire. And by some of these traits their spirits have been raised and their enthusiasm increased, so that they are of all peoples the most boastful and most inclined to remember their famous exploits.

So the Turks are nomads, dwellers in the wilderness and owners of beasts; among non-Arabs they correspond to the Hudhayl among the Arabs, possessing the qualities of the Arabs, as the Hudhayl possess the qualities of the Kurds. And whereas they do not busy themselves with industry and merchandise and medicine and agriculture and engineering and forestry and architecture and

¹ Al-Jawbary, "Revelation of Secrets," mentions as a trick of the trade the employment of a magnet to tamper with the tongue of the balance.

irrigation and the raising of crops, but all their interest is in raids and incursions and hunting and riding and the fights of warriors and seeking for plunder and subduing countries, and their energy is turned in that direction and fitted for such exercises and limited and adapted accordingly, they have made themselves completely masters of that department, and learned all that is to be learned in it; and so it has for them taken the place of industry and merchandise and become their delight and their boast and the subject of their discourse by day and night. Accordingly they occupy in war the position that the Greeks occupy in science and the Chinese in art and the Arabs in the departments we have mentioned and enumerated. And they excel in their line, as the Sasanids do in empire and politics. Here is an illustration to show that they have exhausted their subject and gone deeply into it and reached the furthest limit of acquaintance with it. Before a sword is girt on by anyone or used for offence, it has to pass through many hands and through many grades of workmen, no one of whom does the work as another workman does. None of them could do this properly nor would claim or attempt to do so. For he who [44] smelts the iron for the sword and makes it liquid and clarifies it and frees it from slag is not the same as he who stretches it out to its proper length. And he who lengthens it is not the same as he who gives it its proper shape and makes its surfaces even and adjusted. And he who gives it its proper shape and makes it even is not the same as he who tempers it and whets it. And he who whets it is not the same as he who sets its pommel and fixes it in its hilt. And he who makes the rivets of the hilt and the tips of the pommel and fixes the sword is not the same as he who planes the wood of its scabbard. And he who planes the wood of its scabbard is not the same as he who tans the leather for it. And he who tans the leather for it is not the

same as he who ornaments it. And he who makes the end of the scabbard is not the same as he who stitches its belts. And so with saddles and the different stages of arrow-making and quivers and lances and all weapons, offensive or defensive. The Turk does these all himself from the beginning of the process to the end, without needing any assistance or looking for help to the advice of any friend. They do not turn again and again to a manufacturer nor worry themselves about his delays and procrastination and broken promises and about paying him his wages.

When Aws b. Hajar¹ gave a complete description of a hunter, and went as far as possible in collecting the characteristics necessary for competence, he said:

"Remote from night repose, who feeds much on his game, sticks feathers on his arrows, and cuts them and arranges them."

It is not every Turk on earth that comes up to the description we have given. Nor is every Greek a man of science, nor every Chinaman an artist, nor every Badawy a poet or a finder of tracks. But these peoples exhibit these accomplishments most frequently, and in the greatest perfection, most evidently, and to the greatest extent. We have mentioned the reasons why the Turks are such valorous and accomplished horsemen compared with all other peoples, and the qualities on account of which [45] they have arranged in order all the principles of war, involving as they do marvellous accomplishments and wonderful endowments; such as procure for them the reputation of generosity, magnanimity, and perseverance, whereas they indicate sound training, firm opinion, penetration, and insight. Do you not see that the soldier must have gentleness and knowledge, prudence and resolution, endurance and reserve,

¹ See Guidi, Index to the *Aghani*.

quickness and alacrity, and experience? He must understand horses and armour, he must be well informed about men and countries, about time and place, he must be acquainted with stratagems, with what conduces to his interests as a whole. An empire needs strong ties and means of security; and what strengthens and profits it above all is to be established upon a true basis and set up on a proper foundation, to be made more powerful and glorious, to have the causes of envy removed, to have the hand of injustice prevented even from pointing at it, still more from getting control over it.

Then the Turks replied to him with an argument drawn from analogy. They say: "If nearness to the Sultan is earned by competence, then we are most prominent in loyalty, devotion, and sincerity. And if it comes by kinship, we are nearest of kin. Next it is to be observed that the Arabs consist of two tribes, 'Adnān and Qaḥṭān. And we are more closely connected with the Khalifs than the Qaḥṭān are, and nearer akin. For the Khalif is of the children of Ismā'il b. Ibrāhīm, Blessed Prophets both, more nearly than Qaḥṭān and 'Ābir. And the son of Blessed Ibrāhīm, Ismā'il, had as his mother Hājar, who was of Coptic race. And his other son Ishāq had as mother Sarah, who was a Syrian. And the six other sons of Ibrāhīm were children of Qintūr, daughter of Maftūn, an Arab woman of good stock. And the Qaḥṭān have a saying: 'Our mother is accounted more noble, if she be of Arab stock.' And four of the six settled in Khorasān and begat the Turks of Khorasān. And this is what we have to say to Qaḥṭān. And this again is what we have to say to 'Adnān: 'Ibrāhīm is our father, and Ismā'il is our uncle. And we are related [46] to Ismā'il as you are.'"

It was said by Al-Haytham b. 'Ady¹: "It was said to Mubārak, the Turk, in company with Hammād, the Turk:

¹ A poet of the time of Hārūn al-Rashīd. See Guidi.

'You are of *Madhhij*.' He said: 'What do you mean by *Madhhij*? We acknowledge only Ibrahim, the Friend of God, and the Prince of the Believers.' Al-Haytham said: 'A man of *Madhhij* had happened to come into the country of the Turks, and had a large family.' And à propos of that a poet of the *Shu'ûby* faction said to the Arabs in a long poem:

'You assert that the Turks are children of *Madhhij*;¹
and that there was kinship between you and the
Berbers. But they are the offspring of b. *Ḍabba*
the valiant; whereas *Ṣufân* are a progeny of many
crimes.'

And another poet said:

'When were the Turks children of *Madhhij*? Is it not
a wonderful thing in the world for anyone who
wonders?''

And you have heard of what has been said about the barrier of the B. *Qintâr* and the matter of their cavalry, who went against the Black Country. The story was only intended to create alarm and use them to frighten all the people. So they became an auxiliary and a strong force to Islam, on which the Khalifs might rely, a refuge, a strong shield, and an overcoat to protect the coat. And this saying is recorded: "Keep off the tracks of the Turks so long as they keep off your tracks." And this is a prescription for all the Arabs. For the best course is to let us alone and keep the peace. And what do you think of a people that the "Lord of the two horns" never came within reach of, and in consequence of his saying, "Keep off their *tracks*," they were called *Turks*? This was after he had been victorious over the whole of the world by victory and coercion and humiliation and subjection.

And Blessed 'Umar b. *Khaṭṭab* said: "This is a foe bitterly rabid, but yielding very little spoil." And as

¹ A tribe of Syrian Arabs.

you see, he discouraged interference with them by the plainest of hints. And the Arabic way of describing violent enmity is to say: "They are nothing but Turks and Daylamites."

It was said by 'Amlas b. 'Aqil b. 'Ullafa:¹

"After the parting of my hair grew grey, he requited me with the enmity of a Turk and the hatred of Abu Hisl." [47]

Abu Hisl is the lizard. And the Arabs say: "He is more unnatural than a lizard," because it eats its offspring. The Arab armies fear no people as they fear the Turks. Khalaf al-Aḥmar says:²

"As if when I gave them my sons as hostages, I were conducting them to the folk of brown moustaches."

And Aws b. Hajar alludes to them in his words—

"I turned my camels away from their wells, when I saw them with brown moustaches and with stars in their hands."

I was told by Ibrāhīm b. al-Sindy,³ client of the Commander of the Faithful, a man acquainted with the dynasty heartily devoted to those favourable to the propaganda, who used to protect his patrons and remember their battle days and invite people to the obedience of the 'Abbāsids and explain their merits, and was distinguished in thought and utterance; were I to say that his tongue did more for the benefit of this kingdom than ten thousand drawn swords and sharp lances, that would only be in accordance with the facts. I was told, I say, by him, that he had heard from 'Abdu-'l-Malik b. Ṣālīb, on the authority of his father Ṣālīb b. 'Aly, that Khāqān,⁴ king of the Turks, once

¹ See Guidi.

² See Guidi. He is said to have fabricated verses (Jacob, *Studien in Arab. Dichtern*, iii, p. 18).

³ Also quoted as an authority of Jāhiz in the *Kāmil* of Mubarrad, p. 737.

⁴ Tabary mentions war between Khāqān and Junayd in the neighbourhood of Samarra in 112.

confronted Al-Junayd b. 'Abdu-'l-Rahmān, governor of Khorasān, in battle; and Al-Junayd was alarmed by his power and disturbed by his majesty and found his assembled force too much for him and was frightened and was nonplussed. And Khāqān understood his difficulty and knew his feelings; so Khāqān sent to him saying: "I have not been standing and restraining myself thus, desiring to do mischief or to injure. For if so, I should have swept away your host without leaving you time for reflection. I perceive where the weak spot is. And were it not that if you were to know this trick, you would exploit it upon others besides me among the Turks, I would inform you of the weak spot and disorder and error in your host and the disposition of it. Now I have heard that you are a sensible man, in a high position owing to your family, and honourable in yourself, and learned in your religion. And I want to ask you to [48] resolve some questions, so that I may know thereby your system. So come out to speak with your staff, so that I may do the same. And I will open out my difficulties to you. But bring no force or guard with you; for it is not my way to be treacherous, or, having given a guarantee against myself, my plotting and my guile, then to break my promises. We are a people that do not deal deceitfully or approve of deceit except in war. And if war could go on without deceit, we should not admit it in our practice." And Al-Junayd would only go to meet him alone; so the two left the ranks. And he said: "Ask what you will, and if I have an answer that satisfies me I will give it you; and if not, I will indicate to you some one who knows better to inform you than I do." He said: "What is your judgment in the case of the adulterer?" Al-Junayd said: "We know of two sorts of adulterers. In the one case there is the man to whom we have given a wife to prevent his injuring, to keep him from violating the sanctity of, his neighbours' family. The other case is that of the man to

whom we have given no such privilege, no permission to do so for himself. And as for the man who has no wife, we scourge him with a hundred blows in the presence of a gathering of the people, in order that we may make a public example and caution of him and make him notorious in the cities and blazon his offence more effectively to warn men against him and deter other similar would-be offenders. But when a man to whom we have given such privileges commits adultery, then we stone him with stones, till we kill him." He said: "That is a most excellent and wise arrangement. And what do you do with one who accuses an innocent person of adultery?" He said: "We scourge him with eighty blows; and we never accept his evidence and never believe what he says." He said: "That is a most excellent and wise arrangement. And what do you do with a thief?" Al-Junayd said: "We divide thieves into two classes. The first is that of men who plot to steal property which has been securely bestowed by the owners of it, by digging a hole through their walls or climbing down from the tops of their roofs. Such a man we punish by cutting off the hand that he used for stealing, boring, and climbing. The other kind of thief haunts the road, and interrupts travelling, plots robbery, and draws his weapons; [49] and if the owner opposes him he kills him. This kind of thief we put to death and crucify on the roads and thoroughfares." He said: "That is a most excellent and wise arrangement." Then he said: "And what do you do with those who practise high-handed robbery?" He said: "Wherever there is a case of doubt and wherever there is room for error in judgment and more than one point of view is tenable, in cases of high-handed appropriation and larceny or crime and purloining in eatables and drinkables, then we do not inflict punishment when the case is not proven and there is a possibility that the act was not a theft." He said: "That is a most excellent and wise arrangement.

And what do you do in the case of murder, and when one man cuts off the ear and nose of another?" He said: "Life for life and eye for eye and ear for ear or nose for nose. And if ten men do this jointly we kill them all. And we kill a strong man in revenge for a weak one. And similarly in the case of a hand or a foot." He said: "That is a most excellent and wise arrangement. And what do you say about a liar and a slanderer and offensive person?" He said: "Our way is to remove them and keep them at a distance and to humiliate them. We do not admit their evidence or approve their verdict." He said to him: "And is this all?" He said: "This is our answer in accordance with our religion." He said: "By a slanderer I mean one who sets going and spreads a tale among the people. Such a one I imprison where no one can see him . . . In the case of a liar I cut the offending member by means of which he lied, just as you cut off the hand that has been used for stealing. And as to the buffoon who teaches the people habits of folly, I banish him from my government, and by turning him out cure the minds of my subjects." Al-Junayd b. 'Abdi'l-Rahmān said to him: "You are a people who refer things to what reason permits and to what appears to be the best counsel; but we are a people who follow the prophets, and we hold that we are not suited and are not able to manage God's servants. And that is because God Most High knows best about the hidden interest and the secret of a matter and the truth about it, and its result and its consequences; and men [50] do not know or perceive what is prudent except superficially. And how many a wretch escapes and many a prudent man comes to grief!" He said: "You have never said anything more noble than this, and you have given me much food for reflection."

Ibrāhīm said that on the authority of 'Abdu'l-Malik after Ṣālih, Al-Junayd said: "Well, I have never seen

anyone apter or juster or possessed of greater insight and sagacity than him. I stood by him for three hours; and no part of him moved but his tongue, while no part of me was still all that time. And this is how they describe the kings of the Turks."

And it is related that Sāsān and Khāqān the Great stood together on one of the bridges between the two lines, and had a long conversation; and when they turned away they said: "Khāqān was firmer and finer, and the posture of Kisrā was firmer and finer than that of other kings. Nothing of Khāqān moved except his tongue, and his horse lifted up one hoof and put down another; and the posture of Kisrā was as though it had been cast in a mould. And Kisrā moved his head and made signs with his hand. And it is a remarkable thing that the tribe Al-Hārith b. Ka'b cannot withstand Ḥazm, nor it Kinda, nor Kinda Hārith b. Ka'b. Similarly, it is a remarkable military phenomenon that the Arabs cannot withstand the Turks, nor they the Byzantines, nor they the Arabs."

It was said by Jahm b. Ṣafwān al-Tirmidhy:¹ "We know what took place in the war between the Persians and the Turks, which ended with Kisrā Ibrawīz marrying Khātūn, daughter of Khāqān, in the endeavour to conciliate him by such an alliance and to keep him from doing him a mischief. And we know also the wars that took place between Persia and Byzantium, and how the tide of fortune alternated, and why the olive-tree was planted in Medā'in and Susa, and why 'Rome' was built, and why it was called by that name, and why Kisrā built on the strait opposite Constantinople the vaults and the fire-temples. But when did Byzantium obtain continuous

¹ Jahm b. Ṣafwān (without, however, the *niaba* here added) is mentioned in Shahrastāny as the founder of a Jabarite sect, named Jahmites after him, at the end of the Umayyad period, and as having been killed at Merv.

victory over the Turks of Khorasān, such as became proverbial to the extremity of Darmisa and similar tribes and persons, who are cognate? And Khātūn [51] dwelt with Ibrawīz and bore him a son Shīruia, who reigned after Ibrawīz. And Shīruia married Mary, daughter of the Emperor of Byzantium, who bore him Firūz Shāhy, mother of Yazīd al-Nāqīs, son of Al-Walīd. Yazīd used to say: 'I am the descendant of four kings—Kistrā, Khāqān, Caesar, and Marwān.' And he used to recite this verse in his wars, in which he killed Al-Walīd b. Yazīd b. 'Ātika:—

'I am son of Kistrā; Khāqān is my father; Caesar and Marwān are my grandfathers.'

And when he went in for boasting in his poems about military glories and distinctions, he only referred to Khāqān, saying—

'If I shoot riding forwards or backwards, or climb a slippery mountain upon my colt, Khāqān was my grandfather. Know that and remember it. I surpass him on the plain and on the steep mountain.'

By saying 'climb' he means 'descend', using in this a word of the Syrian dialect originally borrowed from the Arab colonists. And he specified the beast as a colt, because that would be the harder to ride."

It was said by Al-Faḍl b. al-'Abbās b. Razīm:¹ "One day some Turkish cavalry came to us; and there was not one of those outside but entered his fort and locked the gate of it; and they besieged one of those forts. And one of those cavalry saw an old man looking at them from above. And the Turk said to him: 'If you do not come down to me, verily I will kill you in such a manner as I have never killed anyone.' So he came down to him and opened the gate to him; and they entered the fort and carried away everything that was in it. And people

¹ Verses by him are quoted in the *Kāmil* of Mubarrad, pp. 143, 736.

laughed at his coming down and opening to him, when he was in the strongest position and the securest situation. Then he went on with him to a fort, in which I was; and he said: 'Buy him from me.' 'We have no need to do that,' I said. 'I will sell him for one dirhem,' he said. So we threw him a dirhem; and let the man go, and he turned away from us and passed on with his comrades. Then a little while afterwards he returned to us and stood where we could hear him speak. That surprised us. Then he took the dirhem out of his mouth and broke it into two pieces. And he said: 'He is not worth a dirhem. [52] This is a vile swindle. Take this half. At any rate the man is pretty dear at the price of the other half.' He was a most amusing man. And we knew that man for a coward. He had heard of the craft of the Turks in entering cities and fording rivers in war, and he supposed that the Turk would not have bidden him open the door in such a threatening manner if he had not had some such trick up his sleeve."

Thumāma said: "The ants are only to be compared with the Turks. For every single ant has the sense to store its food, and to smell and to scent and to shun what is to be avoided, so that it will only have the night in its hill. Add to this their counterplotting mankind in their plots of covering up food and scaring them, and fastening their food with pegs and covering it in pots, man helping man, as ant helps ant."

Abu Mūsā al-Ash'ary¹ of blessed memory said: "Every kind of creature needs a ruler and a leader and a commander down to the ant."

Abu 'Amr al-Ḍarīr stated that the leader of the ants² is the forager of food, who first goes out to get what he has smelt before his fellows, owing to a divinely implanted

¹ Appointed governor of 'Irāq by 'Umar and governor of Kufa by 'Uthmān.

² Several persons of this name are quoted in Guidi's Index.

instinct, that he alone possesses, and the keenness of his perception. And if he tries to fetch something and exerts himself in moving it, and is not able to do that, after he has done his best, he goes to the other ants and tells them. Then he returns, and they go forth after him like a black thread stretched out. And never does one ant meet another without standing by it and telling it something. Then it parts company with it. So the Turks, every one of them, are quite capable of managing their own business, except in so far as rivalry in excellence is inevitable in all kinds of creatures and plants and inanimate things. Precious stones differ in quality, yet all are valuable. Race-horses vie together, yet all of them are choice steeds.

We have mentioned the good points of all races, in collecting together what we have learned and what has come to our knowledge. And if we have hit the mark, it is by the assistance of God Most High and by His appointment. If we have come short of their deserts, then the blame of our shortcomings must rest with the defects of our knowledge and the lapse of our memory and our lack of information. And as for good intentions and the charitable and pious aim of our good works, we have no fault to find with ourselves [53] therein. There is a distinction between defects due to neglect and indolence and defects due to incompetence and lack of enterprise. If the character of this book had been controversial, proceeding by way of question and answer, and if the author had been expected to aim at exhaustive treatment in every subject that he handled in it, and if the object in view had been self-advertisement, and if the only way of attaining that object had been the vilification of brother and child—then, indeed, it would have been a big book, filling many pages of large compass. In that case the number of those who would have credited its author with knowledge and breadth of learning would have been greater and more conspicuous. But in our judgment

a little that makes for concord is better than a great deal that makes for division. We pray God to save us from such a procedure, and we ask for His assistance and guidance. Verily He ever hears and is near and accomplishes His will.

LIST OF SOME UNCOMMON WORDS OCCURRING IN LETTER III

Page in Cairene edition.	Word.	Meaning.
24	دار العامة	Public audience chamber.
41	قرسطونة	Archimedian balance.
41	قباية	Balance.
41	كستوان	Key-board.
41	بركان	Compass.
46	أبو حسل	Lizard.
51	طلع	Descend (Syrian dialect).

THE TELLING OF TIME IN ANCIENT INDIA

By F. E. PARGITER

CERTAIN passages in the Kauṭīliya Arthaśāstra and the reading of the inscription on the Māṇikiāla stone, published in this Journal for 1914 (p. 641), have invited some attention to the question how time was measured, marked, and told for ordinary use in ancient India ; and Dr. Fleet has recently discussed the ancient Indian water-clock fully (p. 213 *ante*), showing how time was measured and marked by it. This paper continues the subject, dealing with the marking and telling of time for ordinary use. I have to thank him for drawing my attention to the passages in the Arthaśāstra, the Jyotiṣaratnamālā, and the Divyāvadāna, and to the notice of the Jain mubhārtas, and for some criticisms and suggestions.

The Arthaśāstra, when prescribing a king's duties, says¹ :—" He should divide the daytime into eight parts and the night *likewise* by nālikās ; or by the measure of the shadow of the gnomon. A shadow of three pauruṣas, of one pauruṣa, of four aṅgulas (finger-breadths), and mid-day when there is no shadow—these are the forenoon eighth-parts of the daytime : by those *same measures* the afternoon *eighth-parts* are also made known." ² An

¹ Book i, ch. 9 ; R. Shama Sastri's ed., p. 37 :—Nālikābhīr ahar aṣṭadhā rātriṁ ca vibhajet | chāyā-pramāṇena vā | tri-pauruṣī pauruṣī catur-aṅgulācchāyo madhyāhna itī pūrve divasasyaṣṭa-bhāgāḥ | taiḥ paścimāḥ vyākhyātāḥ.

² The *chāyā-pauruṣa*, or larger unit for measuring the shadow of the gnomon, is defined as 12 aṅgulas long ; book ii, ch. 20 ; p. 106. Thus, the height of the gnomon also being 12 aṅgulas, the forenoon was divided into four equal parts by the moments when the length of the shadow was 3 gnomons, one gnomon, or $\frac{1}{2}$ gnomon, until mid-day, when it would be nil ; and the afternoon likewise in reverse order. These lengths allowed of easy determination : see the formula given by Dr. Fleet, JRAS., 1914, p. 174, note.

eighth-part was thus $1\frac{1}{2}$ hours of mean time, that is, a half-prahara or half-watch.¹ The king was enjoined therefore to divide his day and night alike into eight half-watches; and Kauṭilya then directs how he should spend each half-watch, both during the day and at night.

This passage mentions two methods by which the king could tell the time. The first is obviously put forward as the preferential one, and the second as an alternative; and the reason is plain. The second was only possible in the daytime in fine weather, and impossible at night or in cloudy weather; moreover, it held good in reality only when the day and the night were equal, and would not give the time correctly at all seasons of the year.² The first method was practicable and accurate always, for Kauṭilya explains how the *nālikā* was ascertained, namely, by a water-clock; it was the time in which an ādhaka of water in a pitcher flowed out through a hole of specified size in the bottom.³ It comprised, as is well known, 24 minutes.⁴ The half-watch therefore contained $3\frac{1}{2}$ *nālikās* and was easily ascertained, either by reckoning $3\frac{1}{2}$ separate *nālikās* or by using $3\frac{1}{2}$ ādhakas of water in a larger pitcher.⁵ But the king's observance was probably not precise, for he would certainly not have been particular to a quarter-*nālikā* of 6 minutes.

¹ Dr. Fleet has noticed this, p. 229 *ante*.

² See pp. 216, 217 *ante*.

³ Book ii, ch. 20; p. 107. Dr. Fleet has discussed this passage, p. 219 *ante*. With regard to the term *śalūkā* given to the gold rod or pin with which the hole was made, I would add to his note² on p. 223, that Wilson in his note on the passage in the *Viṣṇu Purāṇa* (vi, 5, 8) says *śalūkā* must mean a pipe. But that cannot be. It must have been a solid wire-rod, because to fashion a fixed quantity of gold into cylindrical form of a fixed length determines its diameter, if the cylinder is solid, and therefore determines the size of the hole made therewith; but, if the cylinder is a pipe, determines nothing as to the external or internal diameter of the pipe, and therefore determines neither the size of the hole in the pitcher into which the pipe would be inserted nor the size of the pipe-channel through which the water would flow out.

⁴ See p. 224 *ante*.

⁵ See pp. 229, 230 *ante*.

Time appears to have been announced by striking a drum or gong of some kind, for in another passage Kautilya seeks to prevent a king from misemploying his time, and says¹:—"He should establish as his standard of propriety spiritual preceptors and ministers, who should restrain him from baneful situations, or should strike him on, when he indulges in secret dissipation, with the striking (with the goad or whip) of the *gnomon*-shadows and the *nālikās*." The expression *chāyā-nālikā-pratodena* is noteworthy, and there is manifestly a play on the words *pratodena* and *abhituḍeyuh*. *Chāyā* and *nālikā* here correspond to the same words in the passage cited previously, and are independent as in that passage: "the shadows of the *gnomon* and (or or) the *nālikās*." *Pratoda* means a "goad" according to Böhtlingk and Roth, and a "goad or long whip" according to Monier-Williams; the primary meaning being "an instrument for striking". To regard the shadows and the *nālikās* in themselves as goads or whips would be a far-fetched conceit, which might be possible in the artificial *kāvya* literature, but seems inadmissible in Kautilya's practical and prosaic manual. *Pratoda* must have some special appropriateness in its application to the shadows and *nālikās*; hence it must apparently mean "striking" here, and signify that the shadow-periods and the *nālikās* were announced by striking, presumably on some kind of drum or gong.²

¹ Book I, ch. 7; p. 13:—*Maryādān sthāpayed ācāryān amātyān vā | ya enam apāya sthānebhyo vārayeyuh | chāyā-nālikā-pratodena vā rahasi pramādyantam abhituḍeyuh*. R. Shama Sastri in his translation paraphrases rather than translates this passage, and renders the expression *chāyā-nālikā-pratodena*, "by striking the hours of the day as determined by measuring shadows"; but the shadow of the *gnomon* could not indicate the *nālikās* of 24 minutes, unless very careful and elaborate measurements were made frequently, and nothing could be determined in cloudy weather or at night.

² This was a common practice in later times. Alberūnī, e.g., says that the expiry of the *praharas* or watches was announced by beating a drum or blowing a conch: Alberūnī's *India*, vol. I, p. 337.

"Striking" would be a primary meaning of the word,¹ for the root *tud* is applied to percussion.² This interpretation shows the force of the play on those words, which cannot be brought out unless both meanings are understood in *pratodena*. This word was used in the sense of "striking" the times, and then its other meaning, "goad or whip," suggested the idea expressed by *abhitudeyuh*.³ If the king was indulging in dissipation in private, striking the times aloud would be the most effective method of awakening his attention.

These passages show that the Indians used to measure time by the gnomon and also by a kind of water-clock, and to announce time by striking something, presumably some kind of drum or gong. The Mānikāla stone corroborates this by using the word *āsvananā*, as will be noticed. The longer measure of time in use was the half-watch of 90 minutes, and the shorter was the *nāḥikā*, *nāḍikā*, or *nāḍī* of 24 minutes. The latter was determined by the water-clock; the former either by a multiple of the latter or directly by the gnomon.

In a third passage, which deals with the care of elephants, Kautilya says:⁴—"The first and the seventh of the eighth-parts of the day are *their* bathing-times; the *eighth-part* immediately after *each* of those times is for feeding. In the forenoon⁵ is the time for exercising; the afternoon is the time for drilling.⁶ Two parts of the

¹ As in the expression *śraṇi-pratodin*, "kicking the hinder parts"; Atharva-veda viii, 6, 13. So Böhtlingk & Roth, and Monier-Williams; but Professor Lanman translates, "thrusters forth of women's hips."

² *Todya*, "cymbals"; and *ātodya*, "musical instruments that are struck."

³ *Abhi-tud* is a new word, not in the dictionaries.

⁴ Book ii, ch. 31; p. 136:—*Prathama-saptamāv aṣṭama-bhāgāv aḥnas snāna-kāḥau | tad-anantaram vidhāyāḥ | pūrvāhṇe vyāyāma-kāḥaḥ paścāhnaḥ pratipāna-kāḥaḥ | rātri-bhāgau dvau svapna-kāḥau tri-bhāgas saṁveśanautthānikāḥ*. As regards *pratipāna*, see note ⁶ *infra*.

⁵ The third and fourth eighth-parts immediately before noon.

⁶ The fifth and sixth eighth-parts immediately after noon. The reading in the text, *pratipāna*, "drinking," must be a mistake, because

night¹ is *their* sleep-time; the third part is spent *restlessly* in lying down and getting up." Here the daytime is portioned out according to the eight half-watches, while the night manifestly required no reckoning. The elephant-lines would not be near the royal palace, but away from it, probably outside the city. It was enjoined that the elephants should be tended, exercised, and drilled methodically. Whether the half-watches were ascertained by a gnomon or water-clock, or were guessed at by observing the sun's position, the noteworthy point is that that computation was observed even in the outlying elephant establishment. Evidently then that method of reckoning time was common.

Between the long half-watch and the short *nālikā* was the *muhūrta* of 48 minutes, a double *nālikā*. The inscription on the Māṇikiālā stone² mentions the Greek *hōra*, "hour," which was unknown then in India, and explains it by coupling with it the word *murta* (*muhūrta*) as its nearest Indian equivalent. It says that to determine these a *vihaṇṭi* (as I read the word provisionally) was set up, which seems to mean some kind of water-clock. It also says that these times were to be announced by sounding some instrument (*āśvananā*³) or by calling out (*bhāṇā*⁴); and the former corresponded to Kauṭilya's *pratoda*. It does not make clear whether the hour or the

"three continuous hours for drinking" is absurd. The correct reading is no doubt that put in a note, *pratipādana*, "training and manège"; and I have adopted it.

¹ R. Shama Sastri translates this as "two (out of eight) parts of the night"; but this rendering leaves a large portion of the night unspecified, and only three hours for sleep is insufficient. *Bhāga* here does not refer to the eighth-parts mentioned before, for elephants are left to themselves at night. It is merely "a portion". The meaning is that elephants sleep about two-thirds of the night, and are awake and restless about one-third.

² JRAS., 1914, p. 641.

³ *Āśvananā* might refer to a drum, gong or conch.

⁴ So I read it in my article; but the word may equally well be read *bhaṇā*, with the same meaning, and this form would be perhaps better.

muhūrta was adopted as the period to be notified, but either was quite feasible; because, once the principle of the water-clock was established in general use, it was easy to determine its construction so as to measure any particular period of time. The hours could have been proclaimed by striking or calling out their serial number; and the muhūrtas similarly and also in a third way, namely, by calling out their names, for all the muhūrtas during both day and night were distinguished by name. The inscription describes the satrap Vespāsi as *hora-murta-satta*, "fond of hours, i.e. muhūrtas," a very natural epithet for anyone who was particular in the observance of time, for the foregoing passages from the Arthasāstra show that Kauṭilya himself might have been fitly called *chāyā-nālikāsakta*.

Names were given to all the 30 muhūrtas, that made up a day and a night, by the Hindus, Buddhists, and Jains. The day muhūrtas were reckoned from mean sunrise, and the night muhūrtas from mean sunset. As the daytime contained 15 muhūrtas and the night likewise, midday occurred in the middle of the eighth day-muhūrta, and midnight in the middle of the eighth night-muhūrta. Thus in the daytime muhūrtas 1-7 occurred in the forenoon and muhūrtas 9-15 in the afternoon, while the 8th straddled across noon with 24 minutes before noon and 24 minutes after. Similarly as regards the night-muhūrtas.

One list is found in the Vāyu (66, 40-5) and Brahmāṇḍa (iii, 3, 39-45) Purāṇas. These texts are identical, but the former is far from correct. The text framed by collating them runs thus, the names of the muhūrtas being distinguished by capitals:—

Vāyu and Brahmāṇḍa.

Raudraḥ Śārpas¹ tathā Maitraḥ Pitryo Vāsava eva ca
 Āpyo 'tha Vaiśvadevaś ca Brāhmo madhyāhna-samśritah

¹ Vāyu *Śāruva*, but two MSS. *Śarpuva*.

Prājāpatyas tathaivĒndra¹ Indrāgni² Nīrtis tathā
 Vāruṇas ca tathĀryamṇo Bhagaś³ cāpi dina-śritāḥ.⁴
 ete dina-muhūrtas ca divākara-vinirmūṭaḥ
 śaṅku-ccāyā-viśeṣeṇa veditavyāḥ pramāṇataḥ.
 Ajaikapād Ahir-budhnyāḥ⁵ Pūṣāśvi⁶-Yama-devatāḥ
 Āgneyas cāpi vijñeyāḥ Prājāpatyas tathaiva ca
 Brāhmaṇa Saumyas⁷ tathĀdityo Bārhaspatyas ca Vaiṣṇavaḥ
 Sāvitas ca tathā Tvāṣṭro⁸ Vāyavyas cēti saṅgrahaḥ.
 ete rātrer muhūrtāḥ syuḥ kramōktā daśa pañca ca
 indor gaty-udayā jñeyā nādikā āditas⁹ tathā
 kalāvasthās tv imās tv ete muhūrtā devatāḥ smṛtāḥ.

The most interesting lists are given in the seventh chapter of Śrīpati's *Jyotiṣaratnamālā*, which belongs to the early part of the tenth century.¹⁰ Aufrecht extracted one list of the muhūrtas in the day and night from MS. No. 782 in his Catalogue of Sanskrit MSS. in the Bodleian Library.¹¹ I examined that MS. and found that that chapter contains in its ten verses a good deal more information, for it gives also another list for the day and the night. Śrīpati first sets out his own list of the day-muhūrtas (v. 1) and of the night-muhūrtas (v. 2), and says a muhūrta is the fifteenth part of the day and similarly of the night (v. 3). He then extols the midday muhūrta Abhijit (v. 4), and particularizes which muhūrtas should be avoided on the several days of the week (v. 5): but Abhijit and one or two names so mentioned do not appear in his own list; they really belong to another list which he calls Purāṇic, and which he then sets out, for

¹ Vāyu tathā Aindras.

² Vāyu tathĒndro.

³ Vāyu Bhāgās.

⁴ Vāyu dindśritāḥ.

⁵ Vāyu Ajas tathĀhir-budhnaś ca.

⁶ Vāyu Pūṣāśvi.

⁷ Emended. Vāyu Brahma-Saumyas; but Brahmāṇḍa Saumyas cāpi, so making one muhūrta short.

⁸ Vāyu Tvāṣṭro.

⁹ Vāyu nādikāḥ pādikāḥ.

¹⁰ So stated in the British Museum Catalogue, citing the *Pandit*, new series, vol. xiv, p. 29. Also Winternitz & Keith, Catalogue of Bodleian MSS., No. 1531.

¹¹ p. 332. This reference is due to Dr. Barnett's kindness. The MS. is Walker MS. 192. I cite it as W.

the day (vv. 6, 7) and for the night (v. 8). Of this Purāṇic day-list seven muhūrtas are especially efficacious (v. 9), and every rite that should be performed under any asterism should be performed during the muhūrta which was dominated thereby (v. 10).

The Bodleian contains four other MSS. of this work, marked "MS. Sansk. c 10, c 103, d 23 and d 191";¹ and these I have collated. MS. c 103 makes the enumeration of the names of the muhūrtas perfectly clear, because it numbers the names in serial order, putting after each name its serial number. The chapter is short and interesting, but I set out here only the relevant verses, Nos. 1-4 and 6-8, according to the collated text, and the names of the muhūrtas are distinguished by capitals.

Jyotiṣaratnamālā.

RudrĀbi-Mitra-Pitaro Vasu-Vāri-Viśve

Vedhā Vidhiḥ Śatamakhaḥ Puruhūta-vahni² |

Naktaṁcaraś ca VaruṇĀryama-Yonayaś ca

proktā dine daśa ca³ pañca tathā muhūrtāḥ⁴ || 1

niśā-muhūrtā GiriśĀjapādĀ-

hīrbudhnya⁵-Pāśāśvi-YamĀgnayaś ca |

Vidhātṛ-CandrĀditi-Jiva-Viṣṇu-⁶

Tigmadyuti-Tvāṣṭra-Samīraṇāś ca || 2

dinasya yaḥ pañcadaśo vibhāgo

rātres tathā tad dhi muhūrta-mānam |

Nakṣatranātha-pratime muhūrte

mauhūrtikās tat-sama-karma cāhuḥ⁷ || 3

¹ Winternitz & Keith, Catalogue, Nos. 1534, 1531, 1532, and 1533 respectively. MS. No. 783 in Aufrecht's Catalogue is d 23; the reference there, "Walker 214" is erroneous. It is very interesting because it was received by the Bodleian in 1866, the first Sanskrit MS. that the Library obtained. The chapter begins in c 10 at fol. 15^a, l. 2; in c 103 at fol. 19^b, l. 6; in d 23 at fol. 19^a, l. 4; and in d 191 at fol. 21^b, l. 4.

² This is one name.

³ In c 10 and d 191 *dineṣu daśa*.

⁴ This verse is in the *Vasantatilakā* metre.

⁵ W *Giriś*²; c 10 *GiriśĀjapādo 'hīrb'*. The name *Ahīr Budhnyaḥ* is treated as one word with the base *Ahīrbudhnya* as c 103 expressly shows by numbering it 3.

⁶ *Viṣṇu-Jiva* in c 10.

⁷ This verse in c 103 is placed after verse 5.

aṣṭamo hy Abhijid-āhvayaḥ kṣaṇo
 dakṣiṇābhīmukha-yānam antarā ¹ |
 kīrtito para-kakupsu sūribhir
 yāyinām abhimatārtha-siddhi-dah ² || 4
 Paurāṇikā Raudra-Sitākhyā ³-Maitrāḥ
 kṣaṇāḥ smṛtāś Cārabhaṭas ⁴ caturthaḥ |
 Sāvitra-Vairājika-saṅjñikau ⁵ ca
 Gāndharva-nāmābhijid aṣṭamaḥ syāt || 6
 Rauhya-āhvaya-Valau Vijayo 'nyo ⁶
 Nairṛtaḥ Śatamakho Varuṇas ca |
 antimas tu Bhaga-saṅjñaka ⁷ ukto
 yo 'ṣṭamaḥ sa ca bhavet Kutapākhyas ⁸ || 7
 Raudro Gāndharva-nāmā Draviṇa-
 parivṛdhaḥ ⁹ Sāraṇo ¹⁰ Vāyur Agnī
 Rakṣo Dhātātha Saumyas tad anu
 Kamalajo Vākpatiḥ Pauṣya ¹¹-nāmā |
 Vaikuṇṭho 'nyaḥ Samiro Nirṛtir
 iti nīśā-cāriṇo 'mī muhūrtāḥ
 proktās triḥ-pañca ¹²-saṅkhyā munibhir
 iha Purāṇārtha-cintā-pravīpaiḥ ¹³ || 8

Similar lists are given by Gaṇapati in his *Muhūrta-gaṇapatī*, which was published at Lucknow in 1875,¹⁴ and of which there are two MSS. in the Bodleian marked "MS. Sansk. c 112 and d 202";¹⁵ and by Mahādeva in

¹ W *antaram*.

² In c 103 *siddhaye*. This verse is in the Rathoddhātā metre.

³ In d 191 *Sitākṣa*.

⁴ In c 103 *Cārabhaṭas*: compare *Cāraṇa* in the *Muhūrtamañjarī*, p. 709 *infra*.

⁵ In d 23 *saṅjñikau*.

⁶ W *Vijayākhyo*.

⁷ *Saṅjñita* in c 103, d 23, and apparently d 191.

⁸ *Kutap* in W and c 103. This verse is in the Svāgatā metre.

⁹ In c 10, d 23, and d 191 *parivṛdhaḥ*: i.e. Kubera?

¹⁰ In c 10 *Cāraṇo*.

¹¹ In d 191 *Pauṣya*.

¹² In c 10 *pañca-tri*.

¹³ This verse is in the long Prakṛti metre: c 103 makes it two verses.

¹⁴ Cited here as L.

¹⁵ Winternitz & Keith, Catalogue, Nos. 1557 and 1558 respectively. The passage occurs in ch. 4—verses 80-2 in L, 81-3 in c 112, and 84-6 in d 202; and it adds information similar to that in the *Jyotiṣaratna-mālā*'s verses 3-5. The first chapter deals with *saṁvatsaras* and names the 60 *saṁvatsaras*. The best text is in c 112. The passage begins in

the *Muhūrtadīpaka*, of which a manuscript exists in the Bodleian marked "Walker 159^a".¹ In both these books the day-muhūrtas virtually agree with those in the *Jyotiṣaratnamālā*, but the night-muhūrtas are incomplete. Similarly in the *Muhūrtamārtanda* by Nārāyaṇa, also a later work, where also the night-muhūrtas are incomplete. A MS. of this exists in the Bodleian, marked "Walker MS. 210^b".²

L at p. 19, l. 10; in c 112 at fol. 12^b, l. 7; and in d 202 at fol. 10^b, l. 5. The list runs thus:—

Sivo 'hi-Mitra-Pitaro Vasv-Ambho-Viśva-Vedhasah
Vidhir Indro 'tha Śakrāgnī Rakṣo 'bhitāo 'ryamā Bhagaḥ
muhūrtēśā ime.* proktā divā pañcadaśa kramāt
muhūrtā rajanau Sambhur Ajaikacaranāttrayaḥ †
Dāsrādityaḥ cĀditir ‡ Jivo Viṣṇv-Arkau § Takṣa-Mārutau.

Where * L reads *iti*. † In d 202 °*caranātrayam*, but the true reading may be °*caranābhayaḥ*; L reads this line, *rātrau muhūrtāḥ ŚivĀjāpād Akirbudhaya-Pūṣakāḥ*: after this line a line seems to be lost containing muhūrtas Nos. 3 to 7 (or 8). ‡ L *Dāsrātpaḥ ca Ditr*; all readings apparently corrupt. § Emended from L *Viṣṇvārkaḥ*, c 112 *Vīcarkau*, d 202 *Vīcarka*.

¹ No. 790 in Aufrecht's Catalogue. The day-muhūrtas are on fol. 9^a and the night-muhūrtas on fol. 9^b. It calls them *tithi-lavāḥ*, but the commentary introduces them as *muhūrtas* and quotes the first three verses of the *Jyotiṣaratnamālā* set out *ante*, with some variations. The passage runs thus, in the Śārdūlavikrīḍita metre:—

RudrĀśirviṣa-Mitra-Pitra-Vasu-Vār-ViśvĀbhijit-KĒndra*-pāḥ
Śakrāgnī Nirṭtir dine tithi-lavāḥ Pāṇy Aryamākhya Bhagaḥ |
rātrau Sambhur Ajānāghri-Tasira † Yama-Gādastādviraudrā‡ Harṥ
Sārya-Tvāṣṭra-Samīraṇā nijabhaje kārye spṛtāḥ siddhi-dāḥ ||

Where * i.e. *Ka-Indra*, *Ka* being a name of Prajāpati and other deities. † Or perhaps *Takṣatra*; three muhūrtas are required here. ‡ Or perhaps °*siddhi*°: this long expression apparently comprises five muhūrtas unless the following *Harīḥ* (sic) means the dual *Hari*.

² No. 787 in Aufrecht's Catalogue. The work begins at fol. 79 of the volume. The list is given in ch. 2, and the muhūrtas are called *tithi-lavāḥ*. The verse is at fol. 80^b, l. 9, and runs thus in the Śārdūlavikrīḍita metre:—

ahnah syuḥ Śiva-Sārpa-Mitra-Pitaro Vasv-Ambu-Viśva 'bhijit
KĒndrĒndrāgnī-Niūcarā api JābhitāĀryamākhya Bhagaḥ |
rātreḥ syuḥ Smarāhū trayo † 'jacaranātyamācĀvi-to 'to diti ‡
Jivo Viṣṇu Ināttrayaḥ § tithi-lavāḥ karmesu bhoktāḥ smṛtam ||

Where * The metre requires °*agni*. † Read perhaps *Smarahūtrayo*. ‡ Or °*caranātpam*°; there is much perplexing here. § Or perhaps *Ind ryo*.

Harinārāyaṇa in his *Muhūrtamañjarī*, a late work, gives a list of the day-muhūrtas, which are widely different, making them sixteen in number. It is taken from the MS. in the Bodleian marked "MS. Sansk. c 79."¹ The passage runs thus, the names being clearly distinguished by serial numbers inserted after them in the text² :—

Muhūrtamañjarī

Raudraḥ Śvetas tathā Maitraś Cārvaṭo Jayadevakaḥ
Virocanaś Turadevo 'bhijid-Rāvaṇa-Vālavāḥ
Vibhiṣaṇo Nandanaś ca Yama-Saumya-Bhagās tathā
Sāvitra ity—

The names given to the muhūrtas in the day and the night by the Buddhists are set out in the *Divyāvadāna* twice,³ first in a list stating the lengths of the gnomon-shadows determining each day-muhūrta, and again in a succinct list. Both lists agree, subject to some small variations. The first list runs thus :—

Divyāvadāna

Teṣāṃ muhūrtānām imāni nāmāni bhavanti | āditye udayati
ṣaṇṇavatipauruṣāyām chāyāyām Samudro nāma muhūrto
bhavati | ṣaṣṭipauruṣāyām chāyāyām Śveto nāma muhūrto
bhavati | (and so on, giving the names Samṛddha, Śarapatha,
Atisamṛddhi, Udgata, Samukha, (sthite madhyāhne) Vajraka,
Rohita, Bala, Vijaya, Sarvarasa, Vasu, Sundara, Paramabhaya-
prāpta) | ity etāni divasasya muhūrtāni | atha khalu bhoḥ
Puṣkarasārin rātryā muhūrtāni vyākhyāsyāmi | astau gate
āditye Raudro nāma muhūrtaḥ | tatas Tārāvano nāma
muhūrtaḥ | (and so on, giving the names Sāmpreyaka, Avanta,
Sānuka, Gardabha, Rākṣasa, (sthite 'rdharātre) Avayava,
Brahmā, Diti, Arka, Vidhamāna, Āgneya, Ātapāgni, Abhijit) |
ity etāni rātror muhūrta-nāmāni |

The second list runs thus :—

Caturoṣṭhaḥ Śvetaḥ Samṛddhaḥ Śarapathaḥ Atisamṛddhaḥ
Udgataḥ Sāmukhaḥ Varjanakaḥ Rohitaḥ Balaḥ Vijayaḥ

¹ Winternitz & Keith, Catalogue, No. 1560.

² It begins on fol. 19^a with the words *Ātha muhūrtaḥ*.

³ Ed. Cowell & Neil, pp. 643, 644.

Sarvarasaḥ Vasuḥ Sundaraḥ Parabhayaḥprāptaḥ Raudraḥ Tārā-
vanaḥ Sāmpreyakaḥ Sānukaḥ Anantaḥ Gardabhaḥ Rakṣasaḥ
Avayavaḥ Brahmā Ditiḥ Arkāḥ Vidhanaḥ Āgneyaḥ Ātapāgniḥ
Abhiḥjīd ititūnāni muhūrtānām nāmāni |

The Jain names of the muhūrtas are set out in the *Sūryaprajñapti* (*Sūrapannatti* ¹ *-sūtra*) as noticed by Weber in his "Sacred Literature of the Jains" in his *Indische Studien*.² The list constitutes *pāhuḍa* x, (sub-) *pāhuḍa* 13. I have consulted four MSS. of this work, one in the Bodleian,³ one in the British Museum⁴ and two in the India Office.⁵ The passage is in Prakrit and runs thus⁶ :—

Sūryaprajñapti

Tā kadham te muhūrtānam nāmadheyyā⁷ āhitā ti vadeyyā.⁸
Tā egam-egassa nam aho-rattassa tisam muhūrtā paṇṇattā⁹
taṁ¹⁰ Rodde Sete¹¹ Mitte Vāyu Suple¹² taheva Abbicaṁde¹³
Mahinda Balavaṁ¹⁴ Bāmbho¹⁵ Bahusavve ceva¹⁶ Isāne Tatthe
ya Bhāviyappā Vesamaṇe Vāruṇe ya Āyamaṇe Vijae ya
Viśaseṇe¹⁷ Pāvavacce Uvasame ya Gaṁdhavve Aggi Vese
Saya¹⁸-risahe Āyavaṁ¹⁹ ca Amamaṁ²⁰ ca Āyavaṁ²⁰ ca Bhoma-
risahe Savvaṭthe Rakkhase ceva.

¹ Or *Sūrapannatti*; both forms occur.

² Vol. xvi, p. 408; also in *Ind. Ant.*, xxi, p. 16.

³ Marked "MS. Prakrit d 14"; No. 14 in Keith's *Catalogue of Prakrit MSS.* It is cited as b, and the passage begins at fol. 44^a, l. 10.

⁴ Marked "Or. 5143a", dated Samvat 1702. Cited as m. Passage at fol. 31^b, l. 8.

⁵ One numbered 3376; cited as i; with passage at fol. 24^a, l. 14. The other is a new MS., not yet acquired; cited as n: with passage at fol. 36^b, l. 7. The two are much alike even in their errors.

⁶ Only the material variations are noted.

⁷ So I read the final syllable, which varies somewhat in the MSS. ; or perhaps *jīd*.

⁸ So m: shortened to *paṇ* in the other copies.

⁹ *Tam jahā* in m.

¹⁰ In n *Sate*; i *Seve*.

¹¹ In b *Sugle*.

¹² In m *Asivade*.

¹³ In m merely *Bam*.

¹⁴ In n *Tambho*.

¹⁵ In m *deva*.

¹⁶ In b *Viśase*.

¹⁷ In i *agrivaseṣaya*; b *agrivaseṣasaya*; n *agrivaseṣaya*; m *ajiviseṣaya*. The character *gr* appears to denote a doubled *g*.

¹⁸ In m *Āyavaṁ*.

¹⁹ So i and n: m *Amataḥ*; b *Anamam*.

²⁰ In b *Āyaghaṁ*.

Most of these names are marked off by a small upright stroke placed after and above the final letter in MS. i. The day-muhūrtas seem all fairly clear, and their names (with their Sanskrit equivalents added in brackets) are these :— Rodde (Raudra), Sete (Śveta), Mitte (Mitra), Vāyu (Vāyu), Supīe (Suprita ?¹), Abhicānde (Abhicandra), Mahimda (Mahendra), Balavaṃ (Balavant), Baṃbho (Brahmā²), Bahusavve (Bahusravya ?³), Īsāṇe (Īśāna), Taṭṭhe⁴ (Tvaṣṭr), Bhāviyappā (Bhāvitātman⁵), Vesamaṇe (Vaiśravaṇa), and Vāruṇe (Vāruṇa).

For the night, eleven of the names seem fairly clear, but four are uncertain, which are comprised in the two expressions (1) *Aggivesesayarisāhe*, where MS. i puts a mark only after the letter *se*, and (2) *Bhomarisāhe*, where it puts no mark after *Bhoma*. I have not found anything to help to determine the four names contained herein ; but it seems that *risāhe* (*ṛṣabha*) cannot well be a name by itself because it occurs twice ; and it should presumably be read with the preceding letters as yielding the names *Sayarisāhe* and *Bhomarisāhe*, because *saya* and *bhoma* have not got the nomin. termination *e* like most of the other names, as they should have if names themselves.⁶ If this view be sound, *aggivese* must be read as two names *Aggi* and *Vese*.⁷ The names of the night-muhūrtas (with their Sanskrit equivalents) would then stand thus :— Āṇandhe (Ānanda), Vijāe (Vijaya), Visaseṇe (Viśvasena ?),

¹ The reading *Sugte* would = Skt. *Suprita* ?

² Pischel's Prakrit Grammar, § 402.

³ *Sarva* may represent Sanskrit *sarva*, *śarva*, *savya*, *śavya*, and perhaps *sarpa*. Can *Bahusavve* be read as two names, *Bahu* and *Savve* (*Sarva*) ? If so, the enumeration will require to be altered.

⁴ So in x, 12, *Cittā Taṭṭha-devatāe*, "Citrā belongs to (is dominated by) the deity Taṭṭha."

⁵ Pischel's Prakrit Grammar, § 401 ; and p. 712, note² *infra*.

⁶ *Ca* appears here as *ya* after vowels ; and if *ya* in *saya* be read as = *ca*, the *sa* has not got the nomin. *e*.

⁷ *Aggivese* occurs in x, 14, apparently as the name of one or two of the fifteen days of the lunar *pākya*.

Pāyāvacce¹ (Prājāpatya), Uvasame (Upāsama, or Upaśrama?), Gaṇdhavve (Gandharva), Aggi (Agni), Vese (Vaiśva), Sayarisahe (Śata ṛṣabha?²), Āyavañ (Ātnavant³), Amamañ (A-mama?⁴), Anavañ (Rṇavant?⁵), Bhomarisahe (Bhauma ṛṣabha?), Savvaṭṭhe (Sarvārtha?) and Rakkhase (Rākṣasa).

A comparison of these lists shows that the muhūrtas bear sometimes the names of the deities or powers which dominated them, sometimes those names qualified by some word indicating that dominance, such as *devatā*, *āhvaya*, *sañjñaka* or *-pa*, and sometimes their own more proper names formed therefrom by *vṛddhi*; and that such names are used indifferently, the choice being generally determined by metrical requirements. It also shows that for metrical reasons free use is made of synonyms, so that differences in name are often merely nominal, the different words used meaning the same thing. All such variations are therefore only superficial, the various forms of a name being equivalent; and this is understood in what follows.

A comparison further shows that with the Jyotiṣaratnamālā's own list the lists in the Muhūrtaganapātī, the Muhūrtadīpaka, and the Muhūrtamārtanḍa agree except in one or two points, so that these three books follow the same system as the Jyotiṣaratnamālā and hence do not require further separate notice.

As regards the Hindu nomenclature, then, there are four lists to be considered: (1) that in the Vāyu and Brahmāṇḍa Purāṇas, which may be called shortly the 'Vāyu list'; the two lists given in the Jyotiṣaratnamālā, namely (2) its own list which may be called the 'Jyotiṣaratnamālā

¹ *Prajāpati* appears as *Payīvaṭ* in x, 12—*Rohiṇī Payīvaṭ-devayāde*, "Rohiṇī belongs to the deity *Prajāpati*."

² Medial *t* often becomes *y* in this work; thus *devatā* appears as *devatā* and *devayā*.

³ Pischel's Prakrit Grammar, §§ 83, 348, 396.

⁴ The reading *Amatañ* would = Skt. *Amṛta*.

⁵ Pischel's Prakrit Grammar, § 57.

<i>Purāṇic.</i>	<i>Vāyu-Purāṇa.</i>	<i>Jyotiṣaratnamālā, etc.</i>	<i>Buddhist.</i>	<i>Jain.</i>	<i>Mahārtamanājāri.</i>
Day-Muhūrtas					
1 Rudra.	Rudra.	Rudra.	Samudra or Caturoṣṭha.	Rodda.	Rudra.
2 Sita.	Sarpa.	Abi.	Sveta.	Seta.	Sveta.
3 Mitra.	Mitra.	Mitra.	Sampriddha.	Mitta.	Mitra.
4 Carabhaṭa.	Pitṛya.	Pitṛya.	Sarapathā.	Vāyu.	Carvata.
5 Vāyu.	Vāyu.	Vāyu.	Atisaṃpriddha.	Surda.	Jayadeva.
6 Āpya.	Āpya.	Vārī.	Udgata.	Abhicandā.	Virocana.
7 Vairāja.	Vāve devāḥ.	Vāve.	Sumukha or Saubmukha.	Mahinda.	Turodeva.
8 Abhijit (also Kutaṇḍa).	Brahmā.	Velhas or Abhijit.	Vajraka or Varjanaka.	Balavañ.	Abhijit.
9 Rachiṇa.	Prajāpati.	Prajāpati.	Rohita.	Bambho.	Ravāṇa.
10 Vala.	Indra.	Indra.	Bala or Bala.	Isana.	Vālava.
11 Vijaya.	Indrāgni.	Indrāgni.	Vijaya.	Tattha.	Vibhīṣana.
12 Nirrti.	Nirrti.	Nirrti or Rakṣas.	Sarvarasa.	Blāviyappā.	Nandana.
13 Indra.	Vāruṇa.	Vāruṇa.	Vāsu.	Vesamaṇa.	Yama.
14 Vāruṇa.	Aryaman.	Aryaman.	Sundara.	Vāruṇa.	Saunya.
15 Bhaga.	Bhaga.	Bhaga.	Paramabhaya-prāpta.		Bhaga (with a 16th, Savitr).
Night-Muhūrtas					
1 Rudra.	Aja-ekapad.	Śiva.	Rudra.	Ānubhā.	
2 Gandharva.	Abi-budhnyā.	Aja-pāda.	Tāravana.	Vijā.	
3 Draviṇa-parivṛṭṭha.	Pāṇan.	Abi-budhnyā.	Sāmaproyaka.	Viaseṇa.	
4 Sārana.	Āvin.	Pūṣan.	Avanta or Śanuka.	Payāvaca.	
5 Vāyu.	Yama.	Āvin.	Śanuka or Ananta.	Uvasama.	
6 Agni.	Agni.	Yama.	Gardabha.	Gurubhavya.	
7 Rakṣas.	Prajāpati.	Agni.	Rakṣasa.	Aggi.	
8 Dhātṛ.	Brahmā.	Vidhātṛ.	Avayava.	Vesa.	
9 Soma.	Soma.	Candra.	Brahmā.	Soyariśaha.	
10 Brahmi.	Aditya.	Aditi.	Diti.	Ayavani.	
11 Bhāspati.	Bhāspati.	Bhāspati.	Arka.	Anamam.	
12 Pāṇan.	Vāyu.	Vijṇu.	Vidhamāna or Vidhana.	Anavadi.	
13 Vairāṇṭha.	Savitr.	Sūrya.	Āgneya.	Bhomasaha.	
14 Vāyu.	Tvaṣṭṛ.	Tvaṣṭṛ.	Atapāgni.	Savvaṭṭha.	
15 Nirrti.	Vāyu.	Vāyu.	Abhijit.	Rakkhasa.	

list' and (3) its earlier list which may be designated the 'Purāṇic list'; and (4) the list in the Muhūrtamañjari. These four lists and also the Buddhist and Jain lists are set out in the annexed tables, the simpler forms of names in the Hindu lists being adopted for convenience and uniformity, except where there may be some uncertainty.

In the enumeration of the day-muhūrtas the Vāyu list and the Jyotiṣaratnamālā list agree, but the Purāṇic list and that in the Muhūrtamañjari differ almost wholly therefrom and from each other. As regards the night-muhūrtas the Vāyu and Jyotiṣaratnamālā lists agree very largely, though the insertion of Śiva at the beginning of the latter list has caused a displacement during the first half of the night. Here also the Purāṇic list differs generally, while the Muhūrtamañjari gives no list. The Buddhist and Jain lists are almost wholly different both for the day and for the night.

There are then five distinct lists—(a) the Purāṇic list, (b) the Vāyu-Jyotiṣaratnamālā list, (c) the Buddhist, (d) the Jain, and (e) the Muhūrtamañjari list. Since the Jyotiṣaratnamālā implies that the Purāṇic list is older than its own list, and its own list and the Vāyu list are practically the same, the Purāṇic list is older than the Vāyu list also. The Jyotiṣaratnamālā belongs to the tenth century, but the Vāyu Purāṇa is certainly much older than that, so that their common list must go back some centuries earlier; hence the Purāṇic list must be still older and is indeed the earliest Hindu list. The Buddhist list agrees with the Purāṇic list in several points where the latter and the Vāyu-Jyotiṣaratnamālā list differ, namely, in Nos. 2, 9, 10 and 11 of the day-muhūrtas and No. 7 of the night-muhūrtas. The Jain list agrees with the Purāṇic list in Nos. 1-3 of the day-muhūrtas, agreeing with it in No. 2 where the Vāyu-Jyotiṣaratnamālā list differs therefrom. Possibly then it may be inferred that, as may be *a priori* probable, the order of the lists in

point of time may be this, (1) the Purāṇic list, (2) the Buddhist, (3) the Jain, (4) the Vāyu and (5) the Jyotiṣaratnamālā list.

The Muhūrtamañjarī appears to be a comparatively modern work, yet its list agrees with the Purāṇic in Nos. 2, 4, 8 and 10 of the day-muhūrtas, where the Vāyu and Jyotiṣaratnamālā differ therefrom; while no comparison is possible for the night, because it gives no night-list. What its position is, I have not so far found anything to enable me to say.

ETHNOGRAPHIC NOTES FROM MARSA MATRUH

By ORIC BATES, M.A.

MARSA MATRUH, the classical Parætonium, lies about 150 land-miles west of Alexandria, on the Marmaric coast. During the winter of 1913-14, with the help of my friend W. J. Harding King, Esq., I made a preliminary archæological survey of the locality, and collected a few notes on the modern inhabitants.

Much matter of ethnographic interest is to be gleaned among the natives of Marsa Maṭrūḥ and its vicinity, and during the short time the expedition was in the field some data of this sort were collected.

Except for a few Sudanese waifs, the local population in this region is wholly made up of Bedawin Arabs. These, however, despite their pride in the purity of their stock, are strongly infused with Berber blood. This strain, and the fact that these Arabs are situated on or near a great easterly-westerly road, make it very unsafe to say that this or that usage or custom among them is of Arabic origin; where the people are so mixed, and in such constant contact with travellers, their practices are almost as likely to be adopted as indigenous.

I. TRIBAL DIVISIONS

The Arabs about Marsa Maṭrūḥ belong to the numerous and once powerful tribe of the Aulād 'Aly. Through the kindness of Mikhail Effendi 'Ayūb, Medical Officer at Maṭrūḥ, to whom I am indebted for much information of this sort, I am able to give the following list of sub-tribes and families :—

I. Kabilah-t el-'Abaydy, قبيلة العبيدي, represented by six "houses", بيوت, viz.:

1. Beyt Zahwayk بيت زهويك
2. Beyt el-Āshkar بيت الأشقر
3. Beyt Ṭarīdah بيت طريدة
4. Beyt Zelaym (cf. VII, 2) بيت ظلم
5. Beyt Shakan بيت شكن
- *6. Beyt Shihayd بيت شحيد

*II. Kabilah-t el-Āfrād, قبيلة الأفراد, represented by three "houses", viz.:

1. Beyt Zanīn بيت ظنين
2. Beyt Marzūk بيت مرزوق
3. Beyt el-Ḥawdy بيت الحودي

†*III. Kabilah-t 'Arāwah, قبيلة عراوة, represented by two "houses", viz.:

1. Beyt Ḥidrah بيت خذرة
2. Beyt esh-Shaṭry بيت الشطري

†*IV. Kabilah-t el-'Ashibāt, قبيلة العشيبات, represented by two "houses", viz.:

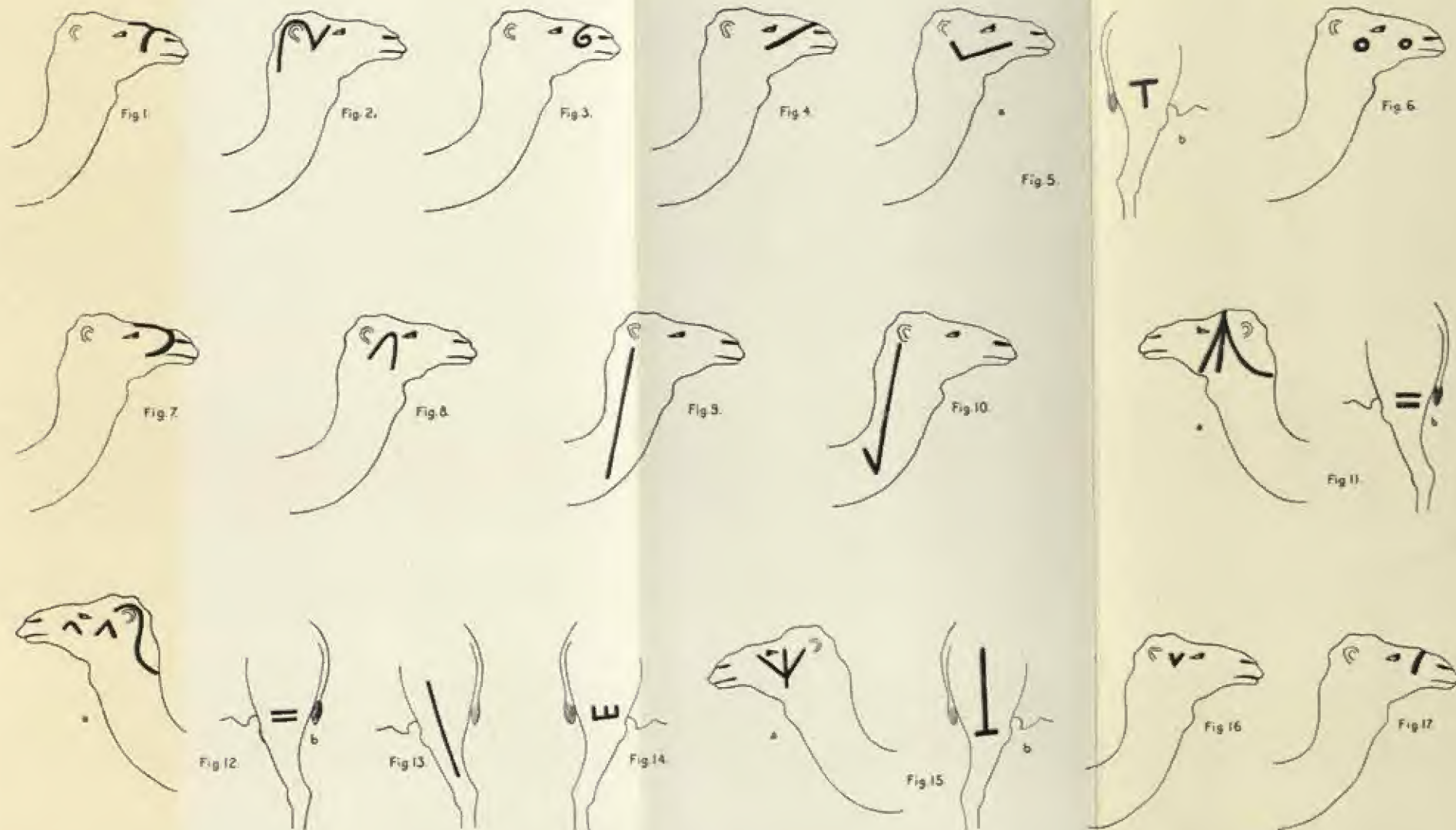
- *1. Beyt Ābū Ma'fas بيت أبو معفس
2. Beyt el-Lazūmy بيت اللزومي

*V. Kabilah-t el-Maghāwrah, قبيلة المغاوره, represented by one "house", viz.:

1. Beyt Ḥash بيت حش

†VI. Kabilah-t 'Awāmah, قبيلة عوامه, represented by three "houses", viz.:

- †1. Beyt Nāfi' بيت نافع
2. Beyt Ābū Karayn بيت أبو قرين
3. Beyt el-Ḥafyān بيت الحفيان



Camel-Brands (Marsa Matruh).

†VII. *Ḳabilah-t el-Gamā'āt* (cf. X, 1), *قبيلة جماعات*, represented by two "houses", viz.:

1. *Beyt Umm Reziḳ* بيت أم رزيق

2. *Beyt Zelaym* (cf. I, 4) بيت ظليم

*VIII. *Ḳabilah-t el-Ḳinayshat*, *قبيلة القنيشت*, represented by three "houses", viz.:

1. *Beyt el-'Aṣy* بيت العصى

2. *Beyt el-'Ayūn* بيت العيون

3. *Beyt el-Waṭar* بيت الوثر

†IX. *Ḳabilah-t el-Ḳuṭ'ān*, *قبيلة القطعان*, represented by one "house", viz.:

1. *Beyt Ābū Tayīb* بيت أبو طيب

*X. *Ḳabilah-t el-Girayḍāt*, *قبيلة الجريضات*, represented by one "house", viz.:

1. *Beyt Gamā'ah* (cf. VII) بيت جماعه

†XI. *Ḳabilah-t es-Ṣarāḥnah*, *قبيلة الصراحنه*, represented by three "houses", viz.:

1. *Beyt Ābū Girzah* بيت أبو جرزه

2. *Beyt 'Abd el-Laṭīf* بيت عبد اللطيف

*3. *Beyt ed-D'abas* (cf. XII, 1) بيت الذعبيس

XII. *Ḳabilah-t el-Manafah*, *قبيلة المنفه*, represented by one "house", viz.:

1. *Beyt ed-D'abas* (cf. XI, 3) بيت الذعبيس

†*XIII. *Ḳabilah-t es-Sanāgrah*, *قبيلة السناجره*, represented by two "houses", viz.:

1. *Beyt Markīḳ* بيت مرقيق

2. *Beyt Ābū Ra'āmsah* بيت أبو رعامشه

*XIV. *Ḳabilah-t el-Kamaylāt*, *قبيلة الكميلات*, represented by two "houses", viz.:

1. *Beyt Ābū Rūābah* بيت ابو روايه

2. *Beyt el-Mamārsah* بيت الممارسه

*XV. *Ḳabilah-t eṣ-Ṣirayhāt*, قَبِيلَةُ الصَّرِيحَات, represented by three "houses", viz.:

1. *Beyt 'Obeyd Allāh* بَيْتُ عُبَيْدِ اللَّهِ
2. *Beyt el-'Awrah* بَيْتُ الْعَوْرَةِ
- *3. *Beyt eṣh-Shtawy* بَيْتُ الشَّوِيِّ

†*XVI. *Ḳabilah-t eṣ-Samalūs*, قَبِيلَةُ السَّمْلُوس, (No "houses" given.)

XVII. *Ḳabilah-t el-Ḥūtah*, قَبِيلَةُ الْحَوْتِ, represented by three "houses", viz.:

1. *Beyt el-Marāẓḡah* بَيْتُ الْمَرَازِقَةِ
2. *Beyt el-Manaf* (cf. XII) بَيْتُ الْمَنْفِ
3. *Beyt el-Waḡlah* بَيْتُ الْوَجِيهِ

XVIII. *Ḳabilah-t el-Laḡāḡmah*, قَبِيلَةُ اللَّجَاحِمَةِ, represented by two "houses", viz.:

- *1. *Beyt eṣ-Sanāniah* بَيْتُ السَّنَانِيَةِ
2. *Beyt Wā'ir* بَيْتُ وَاعِرٍ

*XIX. *Ḳabilah-t Aulād Maṣṣūr*, قَبِيلَةُ أَوْلَادِ مَصْصُور, represented by two "houses", viz.:

1. *Beyt Gadīd* بَيْتُ جَدِيدٍ
2. *Beyt Gabr* بَيْتُ جَبْرِ

XX. *Ḳabilah-t el-'Agārmah*, قَبِيلَةُ الْعَجَارِمَةِ, represented by two "houses", viz.:

1. *Beyt Kuṭaysh* بَيْتُ قُطَيْشٍ
2. *Beyt Sa'id* بَيْتُ صَعِيدٍ

XXI. *Ḳabilah-t el-Mawālik*, قَبِيلَةُ الْمَوَالِكِ, represented by one "house", viz.:

1. *Beyt ez-Zukrah* بَيْتُ الزُّكْرَةِ

†XXII. *Ḳabilah-t 'Amayrah*, قَبِيلَةُ عَمَيْرِ, represented by two "houses", viz.:

1. *Beyt Ābū Rās* بَيْتُ أَبُو رَاسٍ
2. *Beyt Ābū 'Anez* بَيْتُ أَبُو عَنَزٍ

Those names marked by an asterisk in the above list occur in an old account of the Aulād 'Aly given by the French traveller J. R. Pacho,¹ who traversed Marmarica in the first quarter of the last century. Pacho divided the Aulād 'Aly into four *batnān*—the Aulād Ḥarūf, the Sanāniyah, the Sanāgrah, and the 'Aly el-Āḥmar. The absence from the above list of the first and last of these names does not discredit Pacho's divisions, nor even prove them to have become obsolete, for the list here given, though fuller than that of the French traveller, is not, unfortunately, a complete one. This appears clearly from the fact that out of seventeen tribal camel-brands² collected by Mr. Harding King at Maṭrūḥ, only ten belonged to the tribes listed above (those marked with a dagger). Of the remaining seven, one was the *wasṣm* of Aulād Ḥarūf, listed by Pacho, but not by Dr. 'Ayūb: six are therefore left unaccounted for.

2. TRIBAL WUSCM (BRANDS)

The camel-brands collected are as follows:—

(1) *Ḳābilah-t el-'Arāwah*.—A line down the bridge of the nose, crossed by another at right angles (Fig. 1).

(2) *Ḳābilah-t el-'Ashībāt*.—An inverted U over the right ear, joined to a short slanting line between the ear and the eye (Fig. 2).

(3) *Ḳābilah-t el-'Awāmah*.—A whorl by the right nostril, the line then crossing the bridge of the nose, and

¹ *Voyage dans la Marmarique et la Cyrenaïque*, etc., p. 64 sq., Paris, 1827. Pacho's spellings are sometimes puzzling. The equivalences I have noted are: I, 6 (in the above list) = *Shu'eth* (in Pacho, loc. cit.); II = *Ajrat*; III = *Harāouah*; IV = *Acheibat*; IV, 1 = *Mahāffit* (?); V = *Moughaoureh*; VIII = *Ghenācheat*; X = *Djeraïdat*; XI, 3 = *Djouābis* (?); XIII = *Seneghrēh*; XIV = *Kemeiliat*; XV = *Srhlet*; XV, 3 = *Chtour* (?); XVI = *Sammalous*; XVIII, 1 = *Senenēh*; XIX = *Mansour*.

² For the origin of these marks the reader is referred to W. R. Smith, *Marriage and Kinship in Early Arabia*³, p. 247 sqq., London, 1907, and to the literature there cited in the notes.

ending on the left side of the muzzle without a spiral (Fig. 3).

(4) *Beyt Nāfi'*.—A diagonal line, starting from below the right eye, crossing the bridge of the nose, and ending by the left nostril (Fig. 4).

(5) *Kabīlah-t el-Gama'at*.—A right angle on the right cheek, suggesting a letter L lying on its back; the shorter limb is below the ear, the longer meets it near the angle of the jaw-bone, starting from a point nearly between the eye and the nostril. On the upper part of the right hind-leg a mark like a broad-headed T (Figs. 5*a*, *b*).

(6) *Kabīlah-t el-Ku'ān*.—A short horizontal line on the right side of the head below the eye, starting between the ear and eye and ending between the eye and the nostril. Below the line, at either end, a small circle. This, Mr. Harding King conjectured, was the complete form of this *wasm*, which was first reported to him as consisting of the two small circles only—one on either side of, and a little below, the eye (thus shown in Fig. 6).

(7) *Kabīlah-t es-Sarāḥnah*.—A mark something like a letter U placed on its side, made by a line down the bridge of the nose, turning just back of the right nostril, and thence running to a point a little behind the corner of the mouth (Fig. 7).

(8) *Kabīlah-t es-Senāgrah*.—A mark something like an inverted U, between the ear and the eye, on the right cheek (Fig. 8).

(9) *Kabīlah-t es-Samalūs*.—A long straight line on the right side of the neck, reaching almost as high as the ear (Fig. 9).

(10) *Kabīlah-t 'Amayrah*, also called 'Aīt 'Amayrah (أيت عميرد).¹—A long mark on the right side of the

¹ 'Aīt is the Berber filiative corresponding to the Arabic *aulād* or *benū*. Its occurrence at Matruh was noted by Pacheco, who gives it as *heit*.

neck, starting from behind the jaw and ending in a small, acute-angled hook (Fig. 10).

(11) *Aulād Harūf*.—From between the ear and the eye a short straight line crosses the left cheek just behind the eye; a second line starting from the same point ends near the angle of the jaw, while a third, having the same origin, curves below the left ear and up to the back of the neck (Fig. 11a). On the left hind-leg two short horizontal bars (Fig. 11b).

(The spelling of the remaining six tribes is probably only approximately correct.)

(12) *El-'Asaym*.—On the left side of the head two marks like inverted V's, one on each side of the eye, and a curved mark over the ear ending in a counter-curve, like an S on its side. Two short parallel horizontal strokes on upper part of left hind-leg (Figs. 12a, b).

(13) *Gabayhāt*.—A long slanting stroke on the thigh of the left hind-leg (Fig. 13).

(14) *Gatīfah*.—A *wasm* like an E lying on its back, i.e. three short verticals joined at the bottom by a straight horizontal line, placed on the thigh of the right hind-leg (Fig. 14).

(15) *Mahafiat*.—A V-shaped mark, between the points of which the left eye is centred. This V is then bisected by a line starting just back of the eye. On the thigh of the right hind-leg a long vertical stroke, with a short cross-line at its lower end (Figs. 15a, b).

(16) *Legwāshat*.—A single small V-shaped brand between the ear and the eye on the right side of the head (Fig. 16).

(17) *Shawar*.—A slash across the bridge of the nose (Fig. 17).

A number of these camel brands, or modifications of them, are to be seen scratched on rocks here and there in the vicinity of Matrūh; and it is a regular practice, in those cases where an Arab grave is surrounded by

a circular stone wall, to inscribe on one or more of the stones the tribal mark of the occupant.

3. BIRTH AND CHILDHOOD

On the birth of a child its father, if he can afford it, slaughters a sheep in honour of the occasion, and the guests who assemble to partake of it dance and fire off their guns and pistols.

The child's navel-cord is severed with an ordinary knife, and then tied up in a small packet with the hair of a camel or of an ox. The beast from which the hairs are plucked for this purpose becomes henceforth the property of the child.¹ The placenta is buried in the earth. When a child is forty² days old its head is shaved. The hair is wrapped in a bit of cloth, and this is tied to the neck of a domestic animal. This animal, like that with the hair of which the navel-cord was tied, becomes the property of the child. The Bedawin have a very strong feeling in regard to this first hair, which they speak of as "the hair of the angels".

In childhood, when the boy or girl loses his or her first teeth, these, as soon as they come out, are thrown into the air with the exclamation—

بَدَّلْتُ دَرَسِي فَيْكُ يَا أَجْمَدُ

Baddalt dirsy fik yā negmah !

"I have exchanged my tooth for thee, O star!"

¹ A perfect parallel exists among the Gallas. There "the navel-string is carefully kept, sewn up in leather, and serves as an amulet for female camels, which become the child's property, together with all the young they give birth to" (J. G. Frazer, *The Golden Bough*², vol. i, p. 195, London, 1911, citing P. Paulitschke, *Ethnographie Nordost Afrikas: die materielle Cultur der Danakil, Galla und Somali*, p. 192, Berlin, 1893).

² It may be remarked that Celsus considered the fortieth day of a child's life the first critical date in its existence (Celsus, li, 1). Cf. Pliny, *Hist. Nat.*, vii, 4 (5). The Cairenes hold that during its first forty days a child is in danger from the blood-sucking *Umm Kawik* ("R.S." قطيف اللطيف, Cairo, 1894, p. 186).

The explanation given for this practice is that there are from time to time found in the fields white nodules of exceptionally hard stone, which are believed to be fallen stars.¹

4. WOMEN, MARRIAGE, AND MORALITY

Both the married women and the girls of the Aulād 'Aly enjoy a good deal of freedom, which by the general account they do not abuse. When a young man's fancy is taken by a girl, his first act is to secure the services of an old woman to play the go-between. Such an old woman is called a *ḥatīnah*, ختینه (in Egypt the usual word is *itwassat*, إتبسط). The *ḥatīnah* carries messages to the girl, and is charged with her replies. During the courtship the young man regularly addresses the girl as *Yā sa'ādah-t es-Sulṭānah*, and he is obliged to fulfil any task or duty she may require of him. The wedding is celebrated with as much gaiety and circumstance as the families can afford. Sheep are slaughtered, and there is much powder-play and dancing.

Adultery is not common, but is recognized as of two kinds—that which is committed with the consent of the woman and that in which violence is done upon her. In the first case the man is not liable, but the woman must be divorced. In the second the adulterer is forced to pay the injured husband the equivalent of the dowry (*mahr*, مهر) which went with the woman at the time of her marriage.

The penalty for fornication is more severe, for it apparently takes no account as to whether the act was committed with or without consent. In any case the man must pay to the girl's parents the equivalent of her dowry.

¹ A similar custom is known to Algerian children, who toss a lost first tooth toward the sun with the cry: "O Sun, give me a new tooth!"

5. AGRICULTURE

The rich, light soil of Maṭrūḥ would probably have encouraged a certain proficiency in agriculture among the local Arabs, were it not that the scarcity of water and the uncertain rainfall¹ so often cheat the sower of his harvest. No attempt is made to utilize the numerous agricultural cisterns of Roman origin in the district, and the shiftless Bedawin till—or rather scratch and bush-harrow—large tracts in a half-hearted manner, and thereafter wait what God sends, heedless of the poppies and asphodel which, even in the best of years, spring up and choke their barley. In sowing the Arab often mutters this formula—

يا رب اعطينا واعطي منا * يا رزاق من غير منة

Yā rab ā'ṭinā wā'ṭy minnā

Yā razāq min ghayr minnah !

"O Lord, give unto us, and through us unto others, out of Thy bounty!"²

In times of severe drought the Arabs have a rain-ceremony which is of considerable interest. The owners of several fields club together and contribute each some article of clothing, in which a pole or stake is then dressed to represent a woman. This wooden dummy is called "Zarāfah". The Arabs take then this Zarāfah and carry it around their fields, shouting :

يا زرافه هاتي الرقة

Yā Zarāfah hāty er-rafa'ah-ī !

¹ In Roman times, as to-day, the scarcity of rain in this region was well known—*Expositio Totius Mundi et Gentium* (ed. Reise, Heilbrunn, 1878), par. 62 : "Libya [*scil.* Marmarica] . . . quae non accipit aquam de coelo, non pluente eis per singulos annos."

² *يا رزاق من غير منة* means literally "without shame", i.e. "without diminishing Thine own glory". *منة* is used colloquially to denote especially the overweening conceit of a boastful giver, who parades the obligations under which he has laid others.

The meaning of these words is somewhat obscure. زرافه means "a giraffe", and the word was so written and explained by my informant. On the other hand, there is a root ذرف with a sense of "flowing", as in ذَرَفَ, "freely flowing," and in دُرُوفَ, "flowing tears," or "running water". Hence, it is possible that from the context and the purpose of the invocation, زرافه should be read, ذرافه, "one who weeps copiously." The invocation would then have the sense of:

"O Weeper, give help!"

This has a parallel in the Algerian rain-chant:

"O Anzar, moisten us even to the roots!"¹

Another possibility is that the formula has been imported by the runaway Sudanese slaves who have settled at Maṭrūḥ, for it would be strange to find the Bedawin appealing for rain to an animal so characteristically southern as is the giraffe. That the ceremony itself is originally an Arab one, and not a Sudanese importation, I incline to believe because of the existence of a perfect parallel among the Bedawin of Moab, who attire and parade a similar dummy-woman whom they call "the mother of the rain".²

When the procession of the Zarāfah is ended the dummy is stripped; the clothing and finery restored to the lenders, and the wooden stock is thrown away.

The Arabs occasionally set up in their fields a ḥayāl, خیال, or *baw*, بو (a scarecrow), a stick rudely dressed in fluttering rags to give it the semblance of a man. I saw at Maṭrūḥ, however, no scarecrows like those still found in Egypt—ithyphallic dummies which the cultivators equip with parts that can leave the birds, "who would not be

¹ O. Bates, *The Eastern Libya*, p. 179, London, 1914.

² J. G. Frazer, *The Golden Bough*², vol. i, p. 276. Armenian and other parallels will be found in the same work, p. 275 sq.

frightened if they thought it was a woman," in no doubt as to the sex of the figure.¹

6. SICKNESS, ETC.

Among the Aulād 'Aly it is difficult to separate the practice of medicine from that of magic, the former being still largely merged with the latter. Disease is still regarded as in most instances due to magical influences, as, for example, to the evil eye (العين البطالة). The belief in the baleful power of the evil eye is very strong, and so deadly are the glances of some of those who are endowed with it that a man near Maṭrūh is said with one look to have killed a running hare. The fact that the hare was going at full speed exemplifies the concreteness of the ideas connected with this belief—the glance is conceived as being almost as material as a charge of shot.² So generally reputed is this malific power that it is recognized as a reality by the Bedawin law at Maṭrūh. If an Arab is convinced, and can convince others, that he has suffered a loss of property through its having been "overlooked", the man who is supposed to have done him this harm is forced to make good the loss or injury sustained.

Illness and other ailments may be brought about not only by the evil eye but by charms as well. These charms all go by the general name of حجابات, *hegābāt*, a word which properly signifies an "amulet" or "talisman". A *hegab* written to harm or kill an enemy is obtained

¹ Lord Edward Cecil first informed me of these Egyptian scarecrows. In these Priapus-like dummies, and in the current explanation of them, one has an excellent illustration of how an inaccurate popular story is likely to spring up to account for a misunderstood survival. For the ithyphallic *ḥayāl* or *baw* of the modern Egyptian *fellaḥ* represents unquestionably a Priapic phase of Min or of Osiris known to his ancestors.

² Cf. the Arabian conception of the curse as a material thing which can be "dodged" by falling flat on the earth (W. R. Smith, *Religion of the Semites*¹, p. 164).

from a local or itinerant *fakīh* and is then concealed in the tent of the intended victim, or in some such place as the stuffing of his saddle. When the action of the *hegab* has begun it is said that the *fakīh* has "bound him", ربطه.¹

Ailments are to be cured, as they are caused, by supernatural means. Thus cats, wolves, jackals, and snakes are eaten as medicines. The invalid partaking of the last-named remedy must be careful to throw away the serpent's head and tail. Snake's fat is thought a sovereign cure when used as an ointment for wounds.

With more reason, the local Arabs apply garlic to the bites of insects, and onion-juice to prevent wounds from becoming inflamed. Wild thyme (زعتر) is used in cases of syphilis, the herb called *shīh* (شبح, *Absinthium Ponticum* *) for intestinal worms, and that named *ga'dah* (جدد) for colds.

7. LAW, DIVINATION, ETC.

Bedawin law at Maṭrūh is a matter of customary usage as interpreted and administered by the sheykhs. In difficult or special cases an appeal is made to the religious sheykh in charge of the mosque of Sidi 'Awām, and very serious matters, which might end in faction fights or feuds, are now sometimes settled by Egyptian law at the hands of the Coast-Guards, who administer the district in a very efficient manner. It is the wise policy of the officers of the Coast-Guards, however, to keep the Bedawin out of the Egyptian courts as far as possible, and to encourage settlements in the traditional manner.

¹ This phrase is to be related to the tying of magical knots. Such a knot, the *rbāṭ*, is much dreaded in North Africa. E. Doutté, *Magie et religion dans l'Afrique du Nord*, Algiers, 1908, pp. 88, 288 sqq. Cf. T. W. Davies, *Magic, Divination, and Demonology*, etc., London, 1898, p. 55.

² See G. W. Freytag, *Lexicon Arabico-Latinum*, s.v. شبح (vol. ii, p. 470).


³ Ibid. s.v. جدد (vol. i, p. 282).

In cases of theft, the thief, or the whereabouts of the stolen property, is often determined by divination. The man whose belongings have disappeared goes to a *faḳīh* who is skilled in that branch of magic known as *tagzā*. The *faḳīh* takes a number of small pebbles, beans, or the like, which he divides into four groups,¹ and names thus: *حَرَّ وَانْكَيْسَ * أَذْهَبَ * دَبَّارَ * جَبَّارَ*. He then pronounces certain formulæ, after which he is able to divine the sex and appearance of the thief.

The thief being apprehended, he and the owner of the property appear before a council of sheykhs, who oblige the culprit to pay four times the value of the stolen property. If he is unable to pay this amount, his tribesmen must do it for him.

Injuries done in quarrels are regularly atoned for by the payment of a fine. On an appointed day both parties, generally accompanied by large numbers of their nearer kinsfolk, appear before one of the sheykhs whose especial function it is to adjust these differences. The sheykh makes a close and careful scrutiny of the injuries done. He awards so much for a bruise, so much for a cut, and so on, and finally assesses the whole at a total of so many sheep, or a cow, a camel, etc. Sometimes the offender pays his fine in coin, the sums usually ranging

¹ This division into four groups may be in sympathetic relation with the four cardinal points. It may also be pertinent to remark that processes for the recovery of stolen or lost articles are generally called *تربيع*, *terbi'*, or "quadrature", in Africa Minor. Cf. E. Doutté, op. cit., p. 269.

² It is difficult to explain the exact meaning of these words, or their pertinence. *Hurr* may signify here a "freeman"; *inkis* is the name of the geomantic figure , which is often employed in the *darb er-rāml*, and is also called *مَنْكُوس*; *aḥab* is a greyish shade; *dabbār* comes presumably from *دَبَّرَ*, and means "the arranger" or "orderer"; and, finally, *gabbār* means the "Almighty", and is one of the commoner ninety-nine "names" of God.

from £10 to £20. The offender generally pays without a murmur, which is the more remarkable as the sheykh is not, if rumour speak truth, wholly insusceptible to bribes. The fine decided, a feast is made, at which the plaintiff and the defendant eat together. After this the breach is supposed to be—and in reality generally is—healed. In some directions the Bedawin show a great deal of power in “letting bygones be bygones”!

The hearty cursing of one person by another naturally falls under the heading of personal injury, for its effects, in Bedawin eyes, are materially damaging, like those of the evil eye or of assault. The Aulād ‘Alī commonly invoke curses on the father and mother of the person they are damning, with the words *يدفن أبوك* or *يدفن أمك*, “Thy mother be buried!” “Thy father be buried!” or else they name their adversary “dog” or “ass”—*ياكلب* or *ياحمار*. If the matter is one which is serious enough to call for settlement—which in the vast majority of cases it is not—the offender must slaughter a sheep for the man he has cursed. In most cases where such reparation is made, the aggressor has cursed a man older than himself, whose years entitled him to exceptional respect.

Murderers are judged by the sheykh, who impose a heavy fine, called *دية*, *dīah*, upon the slayer. If the murder was intentional, the *dīah* amounts to some £400 in cash or cattle; if accidental, £300 may suffice. It very naturally results from the heaviness of these penalties that, in cases in which murder is committed by a poor family with few near kinsfolk, the compensation sought for is the life of the slayer or one of his relations. Cases of this sort easily develop into family feuds, which are only settled by the intervention of the sheykh, who have a good deal of power in bringing about a satisfactory understanding in these cases.

8. CHARMS.

As intimated above, charms play a large part in the everyday life of the Aulād 'Aly. Not long before our arrival at Matrūh a powerful sheykh—one of the three or four who owned a house—wished to know where to dig a well. A wandering Algerian volunteered to select a propitious spot. He wrote a charm on a bit of paper, prayed over it, and cast it into the air. A strong breeze was blowing, and the scrap of paper was whirled away until it was caught in a bush. The *fakīh* instructed his employer to dig on this spot. He did so and found beneath it an old Byzantine cistern. Two months later the story was told me by the sheykh, who showed me the well and asked for the secret of the *fakīh's* skill.

Love charms are common. These are written to order by a *fakīh*, and should contain both the lover's name and that of the beloved. The *hegab* when finished is either worn by the former or placed by him secretly in the house of the latter. Sometimes, however, another disposition is made of charms of this class. One was found while digging a water-hole on the beach of the harbour, and was written for a woman who sought to renew by its means the waning affections of her husband. The magic paper was wrapped in a bit of rag which was probably torn from the dress of the good wife on whose behalf the charm was written, or from the clothing of the indifferent husband whose affections she sought to recover. As this charm is typical of its class I give it here :¹—

OVERSE

بسم الله الرحمن الرحيم وصلى الله على سيدنا محمد وعلى
آله وصحبه وسلم الله معك ولا اله غيره | هو الله قل هو الله أحد
الله الصمد لم يلد ولم يولد ولم يكن له كفواً أحد بسم الله ما شاء

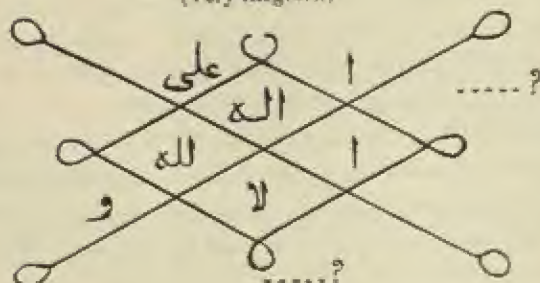
¹ For the transcription and translation of this charm I am indebted to Professor Charles C. Torrey, of Yale University, who courteously furnished me with a clear copy and an English version.

الله لا اله الا الله | والسؤال لله بسم الله ما شاء الله من كان حكيم فمن
الله بسم الله ما شاء الله لا حول ولا قوة الا بالله العلي العظيم
الله | والامر لله *

و	ع	ك	ا	ك
ع	ك	ا	ك	ا
ك	ا	ك	ا	ع
ا	ك	ا	ع	ك
ك	ا	ع	ك	ا

وعود صلى الله على سيدنا محمد وعلى اله وصحبه وسلم *

REVERSE
(Very illegible.)



Translation of Obverse: "In the name of Allah, the Merciful, the Compassionate, and may Allah bless our Lord Mohamammad, and his family and companions, and give them peace. Allah be with thee; there is no other God than He. | He is Allah. Say: Allah is One; He is the Enduring One; He never begat nor was begotten; nor has He any equal. In the name of Allah: What Allah wishes! There is no God but Allah: | and to Allah must all request be made. In the name of Allah: What He wishes! Whoever is wise, it is from Allah. In the name of Allah: What Allah wishes! There is no resource nor power

except in Allah, the Exalted, the Great. Allah! | And (the) command belongs to Allah."

[The table here intervenes.]

And again: "May Allah bless our Lord Moḥammad, and his family and companions, and give them peace!"¹

9. DREAMS, LUCKY DAYS, SUPERNATURAL BEINGS

The Aulād 'Aly are firm believers in the significance of dreams. The Beduī who dreams of a child believes he is about to gain something; to dream of a good man foretells a good month, and of a bad man an evil one. To dream of a beautiful woman signifies that not simply a month but a whole year of prosperity awaits the dreamer; contrariwise, an ugly woman betokens a bad year.

Faith in lucky and unlucky days is as firm as that in dreams. Wednesdays are held unlucky, as is the last Friday in each month. The 9th, 16th, and 19th of each month are very unlucky, but the 2nd, 8th, 14th, 18th, and 20th are correspondingly auspicious.

Belief in the *gann*, in *ghāls*, *'afrīts*, etc., is universal. The *'afrīts* (*'aḡarīt*, عفریت, pl.) are some of them wicked and some of them helpful. Some are found in the fields, and they always lurk in the ashes of fires. If there is any connexion between these two ideas, it may be that they both go back to an ancient belief in the animation of growing things, the souls of which would haunt the places where their embodiments were consumed. The *'afrīts* seem to have no personal names, nor do the Arabs profess to know whether they are male or female in their natures. Those *ḡaḡīḡs* who are adepts in magic, and are

¹ Professor Torrey points out that the grammar and spelling of this charm are not above reproach. In line 3, for example, the word حَكِيم is written حاكيم in the original (the classical form would be حَكِيمًا).

called *fukahā rūḥānīah*,¹ روحانية, can control 'afrits by reading the proper spells. The *gann* are the devils who possess fools and madmen, and it is not wise, even in jest, to call a wild or reckless Arab *magnūn*.

Monsters of a supernatural character are brought to haunt the waste places of the high desert and the sea. In the latter are strange creatures like camels, which appear but rarely, and Mr. Harding King was informed by one of our men that sometimes there emerged from the tide a cow-like animal of terrifying aspect and proportions. If this monster breathed in the face of anyone the person died at once. This statement is of some interest, for it suggests the ancient accounts of a famous Libyan monster, the Catobleps (κατώβλεψ) of antiquity. Aelian, and the Byzantine poetaster Phile (or Philes) after him, have left us ample accounts of this perilous beast.² Its aspect was to some degree that of a bull, yet it had on its spine and along its nose a bristly crest; from beneath great shaggy brows glared its ferocious and bloodshot little eyes, which struck cold terror into the beholder. So virulent and noxious was its breath that if it breathed upon a man he died straightway—

Ἐξεῖσι πνεῦμα τῆς φάρυγγος ἐκ μέσου
 Ὁξυοβαρές καὶ βρόμου πεπλησμένον.
 Ἐν ᾧ ἀναπνέοντα ἄλλα γ' εἰ τύχοι,
 Δεινῶς κακοῦται, καὶ ἀφωνίαῖς ἅμα
 Σπασμοῖς τε πίπτει φθαρτικοῖς παραντίκα.³

¹ For the control of the *gann* by the spiritual power denoted by the word روحانية, *rūḥānīah*, see E. Doutté, *op. cit.*, p. 249.

² Aelian, *De Animalibus*, vii, 5; Phile, *De Animalium Proprietate*, ed. de Pauw, Utrecht, 1730, pp. 178 sqq.; cf. Alexander Myndius, *ap. Athenæum*, v *sub finem*. The last-named writer explained the Catobleps as a Gorgon, likened it to a sheep, and declared that it killed by its glance.

³ Phile, *loc. cit.*, v, 21 sqq.

I may conclude this note upon the superstitions of the Aulād 'Aly at Maṭrūḥ with a word on their conception of meteorites. They believe that the number of unfixed stars corresponds to the tally of all living creatures on the face of the earth, and that the falling of one of these stars signifies the death of some animal. In this their belief differs from that of the Egyptian peasantry, among whom it is commonly held that a falling star is a bolt launched by God against one of the evil *gann*—wherefore the pious exclaim, at sight of such a star, "May God transfix the enemy of Religion!"

10. MOURNING

At funerals the women put off the broad red girdles they commonly wear, and as a sign of mourning wear white ones in their stead. Further, they sew up their silver ornaments in leather and cut their hair short. The mourning period is a year long.

11. SHEYKH SIDI 'AWAM

Mention has in the course of this article more than once been made to Sheykh Sidi 'Awām, سیدی عوّام. This personage is in great repute at Marsa Maṭrūḥ and throughout the surrounding country. A tribe of the Aulād 'Aly, the Kābilah-t 'Awāmah, which has three "houses", even takes its name from this saint. The reputed burial-place of Sidi 'Awām lies to the westward of the little settlement (which is of very recent growth) among the sand-dunes opposite the harbour entrance. There the Egyptian *wakf*, at the instigation of 'Abbās II, some years ago erected a small mosque, where was before merely the saint's grave with its rude enclosure wall of dry-laid stones.

The story of Sidi 'Awām, as collected by one of my men, is as follows:—

"Once upon a time there was a pious fisherman named Sidi 'Awām who lived at Maṭrūḥ. He had a little felucca, in which he used to go fishing. He had always the best of luck and used to make marvellous catches. In those days there also lived at Maṭrūḥ a wicked Jew, who wondered at Sidi 'Awām's great catches, and envied him because of them. He thought that he would also turn fisherman, so, in imitation of the pious 'Awām, he built himself a little felucca. Then the two went fishing. They went out together, but the wicked Jew caught nothing, while Sidi 'Awām brimmed his boat to the gunwales with beautiful fish. This happened a number of times, until the Jew became enraged and slew Sidi 'Awām. But the Arabs found this out, and they buried the good Sidi 'Awām with lamentations in the place where his mosque now stands. And they took the Jew and slew him; and him they buried on the isle in the lagoon east of the harbour, which isle is to this day called the Gezīrah-t el-Yahūdy."

I learnt from another source that Sidi 'Awām was supposed to have come to Maṭrūḥ in a boat "from the west"; that he was ever held, even in his lifetime, to have been a *waly*; and that he died a natural death. The informant from whom I had this version accounted for the name of the Gezīrah-t el-Yahūdy by saying that in old times there lived on the islet two Jews, who were goldsmiths. He added that these Jews were called 'Ishak and Hūgah (?). He could give no account of their death. Some of our local workmen of the expedition pointed out a ruinous cairn on the islet as the grave of the Jew (or Jews), from whom the place was named.

Legends apart, Sidi 'Awām in his grave is to-day the chief personage, under Allah, at Marsa Maṭrūḥ. The Bedawin swear by him as readily as by God, after which they slaughter something for the poor in ratification of the oath. The numerous Arabs who visit this tomb firmly believe that terrible misfortune will inevitably overtake the man who swears falsely by the saint.

Childless women desiring offspring visit the Sheykh's tomb, and there, with rice, barley, and a slaughtered sheep, make a feast for the poor, while the annual *moled*, or birthday festival of the *waly*, is the chief event in the local calendar.

The *moled* comes at the time of the spring harvest, about the middle of May. The pious elders of the Arabs announce to the people the date of the *moled*, to which the Bedawin flock from east and west. On the day of the *moled* the commencement of the festival is proclaimed by the solemn beating of a great drum. A great *fantasiah* then takes place. There are horse-races, an incessant firing of guns and pistols, a continuous ululu-ing on the part of the women, and a great deal of dancing. The festivities last from sunrise to sundown, and conclude with a wholesale slaughter of sheep, which are consumed by the visitors. During the two succeeding days there is much praying in the mosque, until finally the assembly melts and dwindles away, not to meet again until the following year.

It would be rash, on such slight indications as are afforded by the above data, to assume that in the cult of Sheykh Sidī 'Awām we are confronted with a survival from a pre-Islamic epoch. At the same time certain features in the account square well with such a supposition. The brimming boatloads of fish, the coincidence of the saint's anniversary with the spring harvest, the story of his violent death, and his power to grant offspring to sterile women are all consonant with the theory that in pagan times, the good *waly* may have existed as one of those harvest-gods such as survive to-day in Syria, where one finds numerous local St. Georges, etc., of pagan origin, whom both Christians and Moslems delight to honour.¹ In this connexion it is pertinent to remark that

¹ J. G. Frazer, *The Golden Bough*², vol. II, "Taboo and the Perils of the Soul," p. 69.

the patron saint of Kuft, in Upper Egypt, is called Sidi Mohammed el-'Awāmy, and that his cult contains a number of survivals from the old god of the town, Min of Coptos. It is possible that a closer examination of the rites and practices based on the local beliefs at Matruh may prove that to a similar extent Sidi 'Awām¹ is the modern representative of a pagan predecessor.

¹ The name سَاحِلِيّ is a derivative of سَاحِل and means "swimmer".

XXVI

TABLES FOR FINDING THE MEAN PLACE OF THE PLANET SATURN

By J. F. FLEET, I.C.S. (RETD.), PH.D., C.I.E.

IN examining the astrological details of the date in Śaka 380 (p. 482 above), I had to work out the bases for tables, and to make parts of the tables themselves, for finding the mean place of the planet Saturn, that is, his mean longitude, according to the first Ārya-Siddhānta and the Original and Present Sūrya Siddhāntas. It has seemed useful to complete the tables and publish them, with examples of the use of them, so that they may be available for any future work of the same kind.¹ At the same time, I seek to give them an interest by attaching some general remarks and showing the bases from which they have been made.

GENERAL REMARKS

The starting-point of my tables is the beginning of the Kaliyuga era in B.C. 3102, when, according to the Hindū astronomy, there was the latest recurrence of a conjunction of all the planets (including the sun and the moon), by their mean longitudes, at the initial point of the Hindū sphere, namely, the point 0 of the sidereal sign Mēsha (Aries).² According to the First Ārya-Siddhānta this

¹ Tables by Professor Jacobi (on quite different lines) for finding both the mean and the true places of all the planets according to the Present Sūrya-Siddhānta, are being published in the *Epigraphia Indica*, vol. 12, p. 79 ff. I had not seen these when my paper in question was written. Professor Jacobi's process is a shorter one, as a result of much work done by him in making his tables. But his tables do not make mine unnecessary, even for the Present Sūrya-Siddhānta; in the first place, because we want for any time before about A.D. 1000 a much earlier guide than that work; and secondly, because they do not give the very close results which are to be got from my tables.

² On this matter see my paper on the Kaliyuga in J.R.A.S., 1911, p. 493.

conjunction was at mean sunrise, 6.0 a.m., for the prime meridian of Lankā-Ujjain, on 18 February in the said year. According to the two Sūrya Siddhāntas it was at the preceding midnight.

The years in my tables are the mean sidereal solar years of the Kaliyuga: and, as a first step in using the tables, for any given year of the Śaka or any other Hindū era, or of our era, we must take the corresponding year of the Kaliyuga.¹ Each year is the period in which the sun by mean motion travels round the circle of the heavens from the point 0 of the sign Mēsha back to the same point. The length of this year differs slightly according to each of the three authorities, as a result of the difference in the number of days assigned by them (see farther on, under the Bases) to the *exeligmos* or calculative period of 4,320,000 years which constitutes the Yuga, Mahāyuga, or Chaturyuga, the cycle of Four Ages. The lengths of the years are as follows:—

	days	d	h	m	s
First Ārya-S.	365·2586805	= 365	6	12	30
Original Sūrya-S.	365·25875	= 365	6	12	36
Present Sūrya-S.	365·258756481	= 365	6	12	36·56

The days are mean natural or civil days, each of exactly twenty-four hours. For calculative purposes they run from mean sunrise to mean sunrise according to the First Ārya-Siddhānta, and from the preceding midnight to midnight according to the two Sūrya Siddhāntas. But for ordinary use the Hindū day runs from true sunrise to true sunrise according to both the schools.

The revolution of Saturn is his journey round the heavens, through the twelve signs of the zodiac and the twenty-seven *nakshatras* or "lunar mansions", from

¹ We might, of course, lay down as an additive constant the place of Saturn, according to each of the three authorities, for the beginning of the Śaka era in A. D. 78, or for any other chosen time, and then work for only the remaining years. But in my opinion little, if anything, is really gained by that method.

the point 0 of the sign Mēsha back to the same point. His revolution and longitude are, of course, geocentric; the earth being regarded as the centre of the universe in the Hindū astronomy.

From Table I, which gives Saturn's mean yearly motion, we get, as the first step in any working, the number of revolutions completed by him, and, over and above that, his mean place or longitude in signs, degrees, minutes, and seconds, reckoned from the point 0 of Mēsha, at the moment of the mean Mēsha-saṁkrānti, or entrance of the sun into Mēsha, of the given year; that is, at the moment of the mean vernal equinox, which is the astronomical beginning of the year. The date and time of that moment may be ascertained from Sewell and Dikshit's *Indian Calendar*, table 1, taken with the intervals between the true and mean Mēsha-saṁkrāntis given on p. 12, and Sewell's *Indian Chronology*, tables 17 and 38, A, and p. 57. It is not always necessary to reduce Saturn's place at that moment to his place at mean sunrise on that same day, as I have done in Example 1 below (p. 750): but it is generally useful to do so; especially if we are likely to work for more days than one in one and the same year.

In using Table I, the seconds in the first nine years may be turned into even numbers by rejecting anything up to .5 and taking anything over .5 as 1 to be added to the integral number.

Table II, which gives Saturn's mean daily motion and supplies what is wanted for finding his mean place or longitude at any subsequent time in the same year, is in two parts: A, for general use, with the seconds treated on those same lines; and B, for closer work, with the actual seconds to three places of decimals, determined by rejecting anything up to .0005 and treating anything over that as 1 to be added to the third figure.

Results worked from Table I with the seconds treated

as indicated above and Table II, part A, will be close enough for all general purposes. But, if it is ever necessary,—as, for instance, if a resulting place is very near to the beginning of a sign or a *nakshatra*, when a few seconds of arc may make a difference in the sign or the *nakshatra*; or if a resulting time is very near to sunrise, when a few minutes of time or seconds of arc may make a difference in the day,—to get a still closer result, then we must work with the decimals given in Table I and Table II, part B, and must also use actual minutes and seconds, instead of even minutes, in the time of the *Mēsha-samkrānti*: in short, we must then work with exactness all through.

Means may perhaps be added hereafter for finding the true place of Saturn, that is, his true or apparent longitude. But that does not seem necessary at present: there are various indications that the mean places are the right ones to take for the planets down to at any rate about A.D. 1000. And certainly, if a statement about any planet is found to be correct for its mean place though not for its true place, we need not condemn the statement on that account.

In addition to the details given in the next section, which explains the bases of my tables, the following may be noted here:—

The period of Saturn, the time in which he makes one revolution, works out according to the three authorities as follows:—

First Ārya-S.	10766·0646543489...	days.
Original Sūrya-S.	10766·0667012363...	"
Present Sūrya-S.	10765·7730746138...	"

In terms of the mean Julian year of 365·25 days, these figures represent—

First Ārya-S.	29·4758785882...	years.
Original Sūrya-S.	29·4758841922...	"
Present Sūrya-S.	29·4750802864...	"

These cannot be expressed exactly in years, months, and days, because our months have not a uniform number of days. But, with the month taken at $365.25 \div 12 = 30.4375$ days, they represent (say)—

First Ārya-S.	. . . 29y.	5m.	21.62715d.
Original Sūrya-S.	. . . 29y.	5m.	21.62920d.
Present Sūrya-S.	. . . 29y.	5m.	21.33557d.

The periods given above are geocentric, as has already been said. Modern science gives the period of Saturn's sidereal revolution round the sun as—

$$10759.2198 \text{ days,}^1 = 29.457... \text{ years.}$$

Slightly better Hindū approximations were got by Lalla and the person who devised the corrections for the Present Sūrya-Siddhānta: see pp. 747, 750, below. Of these, Lalla's result was the nearer, but only by a little more than three minutes: this is due to his *exeligmos* being shorter by 328 days.

BASES OF THE TABLES

First Ārya-Siddhānta

By this name is meant the Āryabhaṭīya, which was written by Āryabhaṭa at Kusumapura, i.e. Pāṭaliputra, Paṭṇa, in or soon after A.D. 499.² The text, with the commentary by Paramādiśvara, has been edited by Professor Kern (Leiden, 1874). Its elements in this matter are:—

146,564 revolutions of Saturn in the Yuga of 4,320,000 years comprising 1,577,917,500 days.

The mean yearly motion is—

$$\frac{146564 \times 360^\circ}{4320000} = 12^\circ.2136 = 12^\circ 12' 49''.2$$

¹ Lockyer, *Elementary Lessons in Astronomy* (1907), p. 350.

² See my paper in *JRAS*, 1911, p. 110.

The mean daily motion is—

$$\frac{146564 \times 360^\circ \times 60'}{1577917500} = 2^\circ 00' 63041318... \\ = 2^\circ 0' 3782479122...$$

Saturn's period of revolution has been given on p. 744 above. A sign being one twelfth of a revolution, and a *nakshatra* being one twenty-seventh of the same,¹ it follows that he spends—

in one sign . 897.1720545290... days, =
2.4563232156... Julian years, or (say)—
2y. 5m. 14.48455 d.; and—
in one *nakshatra* 398.7431353462... days, or (say)—
398 d. 17 h. 50.11490 m.

Lalla, who was the exponent of Āryabhata and seems to have written in the period A.D. 600–650, introduced certain *bījas* or corrections for the mean motions of all the planets, to be applied to the First Ārya-Siddhānta with effect from the year Śaka 420 expired, so as to bring their calculated places into agreement with their places as determined by observation.² In the case of Saturn he added $\frac{20'}{250} = 4''.8$, by which he raised the mean yearly motion from $12^\circ 12' 49''.2$ to $12^\circ 12' 54''$. Since one revolution in 4,320,000 years would represent $0''.3$ mean yearly motion, and 4.8 divided by $0.3 = 16$, this *bīja* had the effect of increasing the revolutions of Saturn in such a period from 146,564 to 146,580;³ and (since the number of days in the *exeligmos* remained the same) of increasing also the mean daily motion, and of shortening the period of revolution. Thus, according to Lalla,—

The mean yearly motion became—

$$\frac{146580 \times 360^\circ}{4320000} = 12^\circ 215 = 12^\circ 12' 54''$$

¹ That is, according to the equal-space system, by which each *nakshatra* measures $13^\circ 20'$.

² See his *Śiṣhyadhīvriddhida*, ed. Sudhakara Dvivedi, Benares, 1886, p. 10, verses 59, 60; p. 50, verses 18, 19.

³ Lalla, however, did not put his corrections in this shape.

The mean daily motion became—

$$\frac{146580 \times 360^\circ \times 60'}{1577917500} = 2' \cdot 0065231547... \\ = 2' \ 0'' \cdot 3913892836...$$

And Saturn's period of revolution became—

$$\frac{1577917500}{146580} = 10764 \cdot 8894801473... \text{ days} \\ = 29 \cdot 4726611366... \text{ Julian years} \\ \text{or (say) } 29 \text{ y. } 5 \text{ m. } 20 \cdot 45198 \text{ d.}$$

The place of Saturn according to Lalla is got by adding 4°·8 for each year after Śaka 420 expired, = Kaliyuga 3599 expired, to his place as found according to the First Ārya-Siddhānta.

Original Sūrya-Siddhānta

This work is only known from Varāhamihira's statements about it in his *Pañchasiddhāntikā*, which was written about A.D. 550.¹ The *Siddhānta* itself (its author is not known) seems to date from much about the same time with the First Ārya-Siddhānta, but is perhaps rather earlier than that work. The *Pañchasiddhāntikā* has been edited by Dr. Thibaut and the *Mahāmahōpādhyāya Sudhakara Drivedi*, with a Sanskrit commentary by the editors and an English translation (Benares, 1889). Here the elements are :—

146,564 revolutions of Saturn in 4,320,000 years comprising 1,577,917,800 days.²

¹ There is a very useful paper on the Original Sūrya-Siddhānta, by Sh. B. Dikshit, in the *Indian Antiquary*, vol. 19 (1890), p. 45. It seems likely that the text of the work might be found in Burma or Arakan, as it has been followed there down to quite recent times: see, e.g., Sir Alfred Irwin's *Burmese and Arakanese Calendars* (1900), p. 3, and his "Elements of the Burmese Calendar from A.D. 638 to 1752" in *Ind. Ant.*, 1910, p. 289.

² The actual *exeligmos* or calculative period of this work is one of 180,000 years comprising 65,746,575 days; and the numbers of the revolutions of the planets are not stated in actual words. The editors have worked out the numbers of the revolutions for the longer *exeligmos* from the details given in *Pañchasiddhāntikā*, chapter 16; see trans., p. 91; comment., p. 88; introd., p. 19.

The number of revolutions being the same, the mean yearly motion is also exactly the same as by the First Ārya-Siddhānta; viz.—

$$\frac{146564 \times 360^\circ}{4320000} = 12^\circ 2136' = 12^\circ 12' 49'' \cdot 2;$$

and so the place of Saturn according to this work at the beginning of a year differs from his place according to the F.A.S. only in proportion to the time by which the mean Mēsha-samkrānti of this work differs from that of the mean Mēsha-samkrānti of the F.A.S.

The number of days being more by 300, the mean daily motion is slightly less, viz.—

$$\frac{146564 \times 360^\circ \times 60'}{1577917800} = 2' 0063037504... \\ = 2' 0'' 3782250252...$$

Saturn's period has been given on p. 744 above. It follows that he spends—

in one sign . 897.1722251030... days, =
2.4563236826... Julian years, or (say)—
2y. 5m. 14.48473d.; and—
in one *nakshatra* 398.7432111569... days, or (say)—
398d. 17h. 50.22407m.

Present Sūrya-Siddhānta

This work is well known from the translation by E. Burgess, with Whitney's invaluable notes, published in the Journal of the American Oriental Society, vol. 6 (1860), pp. 141–498.¹ Its text, with the commentary by Rāṅganātha, has been given by F. E. Hall and Pandit Bapu Deva Sastri in the Bibliotheca Indica series (Calcutta, 1859) and by Pandit Hari Shankar (Benares, 1881). It is not known when and by whom the work was written. But, as was pointed out by Whitney (*loc. cit.*, p. 424), its general system

¹ There is also a translation, with a few notes, by Pandit Bapu Deva Sastri (Calcutta, 1861).

is older than that of Bhāskarāchārya's *Siddhāntaśīrōmaṇi* (written A.D. 1150). And Sh. B. Dikshit has said that it superseded the Original *Sūrya-Siddhānta* probably not later than A.D. 1000.¹ Bhāṭṭōtpala, writing his commentary on the *Bṛihat-Saṃhitā*, chapter 2, at some time about A.D. 966, does not seem to quote there any of the elements in which the Present differs from the Original *Sūrya-Siddhānta*. According to this work, the elements in our present matter are:—

146,568 revolutions of Saturn in 4,320,000 years comprising 1,577,917,828 days; which figures increase the yearly and daily motion and shorten the period of revolution.

The mean yearly motion is—

$$\frac{146568 \times 360^\circ}{4320000} = 12^\circ.214 = 12^\circ 12' 50''.4$$

The mean daily motion is—

$$\frac{146568 \times 360'' \times 60'}{1577917828} = 2'.0063584705... \\ = 2' \ 0''.3815082314.$$

Saturn's period has been given on p. 744 above. It follows that he spends—

in one sign . 897.1477562178... days, =

24562566905... Julian years, or (say) —

2y. 5m. 14.46026d.; and—

in one *nakshatra* 398.7323360968... days, or (say)—

398d. 17h. 34.56398m.

The elements of the Present Sūrya-Siddhānta, that is, its number of days for the 4,320,000 years and its numbers of the revolutions of the planets in that period, may be regarded as the results of *bhījas* or corrections applied to the Original Sūrya-Siddhānta. To the Present Sūrya-Siddhānta itself certain *bhījas* were applied in the fifteenth century, with effect from the beginning of the Kaliyuga:

¹ *Indian Calendar*, p. 8.

and by one of them the number of revolutions of Saturn was raised to 146,580 in the *exeligmos* of the same number of years and days.¹

This further raised—

the mean yearly motion to $12^{\circ} 215' = 12^{\circ} 12' 54''$, and

the mean daily motion to $2' 0'' 3913642560...$;

and reduced—

the period of revolution to 10764·8917178332... days.

The place of Saturn according to this *bija* is got by adding $3^{\circ} 6'$ for each year, from the beginning of the Kaliyuga, to his place as found according to the Present Sārya-Siddhānta.

EXAMPLES

The place of Saturn means here his place by mean motion; that is, his mean longitude.

The times are for mean sunrise, 6.0 a.m., at Ujjain, the Hindū Greenwich.

The *nakshatras* are taken according to the equal-space system, by which each of them measures $13^{\circ} 20'$.²

1. What was the place of Saturn, according to the First Ārya-Siddhānta, at mean sunrise on 25 August, A.D. 458, on which day there began the *tithi* Āśvina śukla 1, Śaka 380 expired?

Śaka 380 expired being the Kaliyuga year 3559 expired, we proceed as follows; omitting the revolutions as not being wanted for present purposes, but bearing

¹ For a useful note on these *bijas*, see Sh. B. Dikshit's *Bhadratiṅga-Jyotiṣāḍatṛa* or "History of Indian Astronomy," p. 184. Who devised these corrections, is not known: but they are stated in the shape of the resulting numbers of the revolutions, in the *Makaranda*, a work composed by an author of that same name, a resident of Benares, who is believed to have written it in A.D. 1478. It seems to be only by a coincidence that the number of revolutions thus assigned to Saturn, viz., 146,580, is the same with that which results from the correction for Saturn applied by Lalla to the First Ārya-Siddhānta.

² For the necessary details of the *nakshatras*, according to both this system and the two systems of unequal spaces, see Sewall's *Indian Chronology*, table 22.

in mind that every twelve signs add one more revolution, and we have to take into account here only the excess over the revolutions:—

By Table I, col. A:—

	s	°	'	"
years: 3000 . . .	9	11	0	0
500 . . .	11	16	50	0
50 . . .	8	10	41	0
9 . . .	3	19	55	23

Place of Saturn at mean Mēsha-saṃkrānti, Śaka 380 expired, on
20 March, A.D. 458, at 15h. 27m. . . 8 28 26 23

We reduce this for mean sunrise on that same day by deducting his motion for 15h. 27m., or say 15h. 24m., at 1 hour = 5" and 12 minutes = 1", = 77", = 1' 17" :—

from	8	28	26	23
deduct for 15h. 24m. .			1	17

Place of Saturn at mean sunrise on
20 March, A.D. 458 8 28 25 6

Since 20 March is the day 79 of the year A.D. 458, and 25 August is the day 237, we proceed for 237 — 79 = 158 days, which will take us from any particular moment (in this case, mean sunrise) on 20 March to the same moment on 25 August :—

	s	°	'	"
to	8	28	25	6
add for days (Table II, part A) :—				
days: 100	3	20	38	
50	1	40	19	
8		16	3	

Place of Saturn at mean sunrise on
25 August, A.D. 458 9 3 42 6

Accordingly, at mean sunrise on the given day, Saturn had completed nine signs of his current revolution, and

I. Mean yearly motion

years	A					B				
	FIRST ĀRYA AND ORIGINAL SŪRYA SIDDHĀNTAS					PRESENT SŪRYA SIDDHĀNTA				
	r	s	°	'	"	r	s	°	'	"
1			12	12	49.2			12	12	50.4
2			24	25	38.4			24	25	40.8
3		1	6	38	27.6		1	6	38	31.2
4		1	18	51	16.8		1	18	51	21.6
5		2	1	4	6.0		2	1	4	12.0
6		2	13	16	55.2		2	13	17	2.4
7		2	25	29	44.4		2	25	29	52.8
8		3	7	42	33.6		3	7	42	43.2
9		3	19	55	22.8		3	19	55	33.6
10		4	2	8	12.0		4	2	8	24.0
20		8	4	16	24.0		8	4	16	48.0
30	1	0	6	24	36.0	1	0	6	25	12.0
40	1	4	8	32	48.0	1	4	8	33	36.0
50	1	8	10	41	0.0	1	8	10	42	0.0
60	2	0	12	49	12.0	2	0	12	50	24.0
70	2	4	14	57	24.0	2	4	14	58	48.0
80	2	8	17	5	36.0	2	8	17	7	12.0
90	3	0	19	13	48.0	3	0	19	15	36.0
100	3	4	21	22	0.0	3	4	21	24	0.0
200	6	9	12	44	0.0	6	9	12	48	0.0
300	10	2	4	6	0.0	10	2	4	12	0.0
400	13	6	25	28	0.0	13	6	25	36	0.0
500	16	11	16	50	0.0	16	11	17	0	0.0
600	20	4	8	12	0.0	20	4	8	24	0.0
700	23	8	29	34	0.0	23	8	29	48	0.0
800	27	1	20	56	0.0	27	1	21	12	0.0
900	30	6	12	18	0.0	30	6	12	36	0.0
1000	33	11	3	40	0.0	33	11	4	0	0.0
2000	67	10	7	20	0.0	67	10	8	0	0.0
3000	101	9	11	0	0.0	101	9	12	0	0.0
4000	135	8	14	40	0.0	135	8	16	0	0.0
5000	169	7	18	20	0.0	169	7	20	0	0.0

II. Mean daily motion

A. For all the three Siddhāntas: with even seconds.

For parts of a day, 1 hour = 5"; 12 minutes = 1".

days	°	'	"	days	°	'	"	days	°	'	"	days	°	'	"
1		2	0	6		12	2	20		40	8	70	2	20	26 ^a
2		4	1	7		14	3	30	1	0	11	80	2	40	30 ^b
3		6	1	8		16	3	40	1	20	15	90	3	0	34
4		8	2	9		18	3	50	1	40	19	100	3	20	38
5		10	2	10		20	4	60	2	0	23	200	6	41	16
												300	10	1	53 ^c

^a For the Present Sūrya-Siddhānta, the seconds here are 27.^b For the P.S.S., the seconds here are 31.^c For the P.S.S., the seconds here are 54.

B. For the separate Siddhāntas: with actual seconds.

days	FIRST ĀRYA			ORIGINAL SŪRYA			PRESENT SŪRYA		
	°	'	"	°	'	"	°	'	"
1		2	0.378		2	0.378		2	0.382
2		4	0.756		4	0.756		4	0.763
3		6	1.135		6	1.135		6	1.145
4		8	1.513		8	1.513		8	1.526
5		10	1.891		10	1.891		10	1.908
6		12	2.269		12	2.269		12	2.289
7		14	2.648		14	2.648		14	2.671
8		16	3.026		16	3.026		16	3.052
9		18	3.404		18	3.404		18	3.434
10		20	3.782		20	3.782		20	3.815
20		40	7.565		40	7.565		40	7.630
30	1	0	11.347	1	0	11.347	1	0	11.445
40	1	20	15.130	1	20	15.129	1	20	15.260
50	1	40	18.912	1	40	18.911	1	40	19.075
60	2	0	22.695	2	0	22.694	2	0	22.890
70	2	20	26.477	2	20	26.476	2	20	26.706
80	2	40	30.260	2	40	30.258	2	40	30.521
90	3	0	34.042	3	0	34.040	3	0	34.336
100	3	20	37.825	3	20	37.823	3	20	38.151
200	6	41	15.650	6	41	15.645	6	41	16.302
300	10	1	53.474	10	1	53.468	10	1	54.452

was at the point $3^{\circ} 42' 6''$ of the tenth sign Makara (Capricornus).

Also, since $9^{\circ} 3' = 273^{\circ}$, and the *nakshatra* Uttara-Ashādhā begins at $266^{\circ} 40'$ and ends at 280° , he was at the point $273^{\circ} 42' 6'' - 266^{\circ} 40' = 7^{\circ} 2' 6''$ of that *nakshatra*.

2. When, according to the First Ārya-Siddhānta, did Saturn enter the *nakshatra* Uttara-Ashādhā, in which, as we have found above, he was on 25 August, A.D. 458, in Śaka 380 expired?

It is seen almost at a glance that this must have been before the beginning of Śaka 380 expired, and in the preceding year. Accordingly, we proceed as follows:—

From Example 1:—

Place of Saturn at mean Mēsha-samkrānti, Śaka 380 expired	8	28	26	23
deduct mean yearly motion for one year (Table I, col. A)		12	12	49
Place of Saturn at mean Mēsha-samkrānti, Śaka 379 expired, on 20 March, A.D. 457, at 9h. 14m.	8	16	13	34
deduct for 9h. 14m., or say 9h. 12m., at 1h. = $5''$ and 12m. = $1''$				46
Place of Saturn at mean sunrise on 20 March, A.D. 457	8	16	12	48
Since $8^{\circ} 16' = 256^{\circ}$, and Uttara-Ashādhā begins at $266^{\circ} 40'$,				
from	266	40	0	
deduct place at mean sunrise on 20 March, A.D. 457	256	12	48	
remainder	10	27	12	

This remainder is the distance which Saturn then had to go to enter Uttara-Ashāḍhā. It amounts to $627^{\circ} 12''$, which, at $2'$ per day, represents roughly (but appreciably less than) $313\frac{1}{2}$ days. We try for 312 days:—

distance to go	10	27	12
deduct for days (Table II, part A):—			
days: 300	10	1	53
10		20	4
2		4	1
	10	25	58
remainder still to go		1	14

This remainder being less than the mean motion for one day, viz. $2'$, we see that we have got the right day.

Now, 20 March being the day 79 of the year A.D. 457, we have $79 + 312 = 391 - 365 = 26$, which takes us from any particular moment (in this case, mean sunrise) on 20 March, A.D. 457, to the same moment on 26 January, A.D. 458. Accordingly, we have:—

Place of Saturn at mean sunrise on			
20 March, A.D. 457	256	12	48
add for 312 days, as above	10	25	58
Place of Saturn at mean sunrise on			
26 January, A.D. 458	266	38	46

Saturn then still had to go $1^{\circ} 14''$, or say $1^{\circ} 15''$, to enter Uttara-Ashāḍhā: and at $5''$ per hour this represents $75 \div 5 = 15$ hours.

Accordingly, he entered Uttara-Ashāḍhā at 15 hours after mean sunrise on 26 January, A.D. 458.

3. In the same period, and again according to the First Ārya-Siddhānta, on what day did Saturn leave Uttara-Ashāḍhā and enter the next *nakshatra* Śravaṇa?

This can be got from what we have worked under Example 2, thus:—

We have found there that Saturn entered Uttara-Ashādhā at 15 hours after mean sunrise on 26 January, A.D. 458.

His time in each *nakshatra* (see p. 746 above) is 398d. 17h. 50·11490m.

	d	h	m
to day and time in January,			
A.D. 458	26	15	0
add for one <i>nakshatra</i>	398	17	50
	425	8	50
deduct days—			
in A.D. 458	365		
in Jan., A.D. 459	31		
in Feb., „	28	=	424
remainder	1	8	50

That is, he left Uttara-Ashādhā and entered Śravana at 8h. 50m. after mean sunrise on the day 1 after 28 February, that is, on 1 March, A.D. 459.

Remark.—By actual working from the mean Mēsha-saṁkrānti in A.D. 458, we should find the time to be 9 hours. The difference, 10 minutes, = less than 1" of longitude, is due to the way in which we have worked, and is negligible for present purposes: we only wanted to fix the day; and the time is so far from sunrise as to leave no doubt as to that. But this process of carrying on—(and so, also, that of carrying back, used under Example 2 by deducting for a year instead of making a separate calculation)—must be used cautiously.

MISCELLANEOUS COMMUNICATIONS

THE PREFIX A- IN THE INDO-CHINESE LANGUAGES

Under the modest title "Sur quelques textes anciens de chinois parlé"¹ M. Henri Maspero has made a most remarkable contribution to the history of the Chinese language, which takes the same high rank as T. Watters' *Essays on the Chinese Language*, published in 1889 and, like the latter, will form a fundamental basis for the elaboration of a real life-history of Chinese speech to be written in the future. The careful study of M. Maspero, based on the critical analysis of five Chinese Buddhist works traceable to the ninth century, discloses for the first time what has come down to us of the remains of the colloquial language of those days,² the rich material being well arranged under convenient grammatical categories. It is, however, not only for the historical grammar of Chinese, but also for the comparative study of Indo-Chinese languages that M. Maspero's researches are of prime importance; and for this reason I take the liberty to draw the attention of students of Indo-Chinese philology to the interesting work of this scholar, simultaneously demonstrating through a practical example how his studies may be rendered useful and fertile in their application to cognate languages. It is as a tribute to M. Maspero's scholarship, and an expression of my grateful recognition

¹ Bulletin de l'Ecole française d'Extrême-Orient, vol. xiv, No. 4, 1914.

² Attempts in this direction have not been many in the past. We have from the pen of C. de Harlez a study on "Le chinois parlé au vi^e siècle A.C., d'après l'I-t'i" (*T'oung Pao*, vol. ix, pp. 215-25, 1898), and from M. Jametel, "L'argot pékinois et le Kin-ping-mei" (reprint from *Mém. Soc. sinico-japonaise*, vol. vii, Paris, 1888, pp. 18); but de Harlez and Jametel, on the ground of their literary sources, treat only of the style and phraseology of colloquial speech, not, as M. Maspero does, of its structure. His work, therefore, is entirely original.

of the high character of his researches, that the following observations have been penned.

On p. 13 of his treatise M. Maspero notes that in the Chinese oral language of the ninth century, terms denoting relationship are generally preceded by a sort of prefix, *a* 阿; as, for instance—

- | | | |
|----------------|---------------------|-----------------------------------|
| <i>a-ye</i> | 阿 爺, father. | |
| <i>a-fu</i> | 阿 父, father. | |
| <i>a-niang</i> | 阿 娘, mother. | |
| <i>a-hiung</i> | 阿 兄, elder brother. | |
| <i>a-ši</i> | 阿 師, master, monk. | |
| <i>a-kiu</i> | 阿 舅, uncle | } in Buddhist texts. ¹ |
| <i>a-yi</i> | 阿 姨, sister | |

This phenomenon, however, is older even than the ninth century, for in a work of the epoch of the Six Dynasties, the *Han wu ku shi* 漢武古事, we meet the form *a-kiao* 阿嬌 ("lass").² Moreover, we encounter the same prefix in combination with the interrogative pronoun *a-šei* or *a-sui* 阿誰,³ and in the interrogative adjectives *a-na* 阿那 and *a-na-ko* 阿那箇 ("quel?").⁴ Again, the great antiquity of this case is borne out by an instance of the use of the pronoun *a-šei* in the *San kuo chi* 三國志.⁵

An ancient (perhaps dialectic) demonstrative pronoun seems to be preserved in *a-tu* 阿堵, chiefly used with reference to money;⁶ and since Tibetan and other Indo-Chinese languages combine the prefix *a-* with the

¹ Maspero, loc. cit., p. 34.

² Maspero, loc. cit., p. 34.

³ The interesting coincidence with Lo-lo *a-sa* (Nyi dialect) and *a-so* (A-hi dialect), "who?" old Burmese *a-su* (see B. Houghton, JRAS., 1896, p. 33), Lo-lo *a-mi*, "what?" (Burmese *a-be*, "what?"), Mo-so *a-ne* ("who?"), and *a-še* ("what?"), may be pointed out right here, as well as the apparent relationship of Chinese *šui*, Tibetan and Newari *su*, and Lo-lo *so*, *su*.

⁴ Maspero, loc. cit., pp. 25-6.

⁵ Maspero, loc. cit., p. 34.

⁶ Giles, *Chinese-English Dictionary*, No. 12045 (likewise in Palladius).

demonstrative pronoun, it is justifiable to regard the element *a* in *a-tu* as the same prefix. What is still more curious is, that the same expression *a-tu* in a passage of the *Tsin shu*, according to a gloss in the *P'ei wên yün fu*, assumes the significance "eyes".¹ Again, as numerous related languages affiliate the prefix *a-* with names of bodily parts (see below), we are entitled to identify the element *a* in the word *a-tu* ("eye") with the prefix, and to explain *tu* as a dialectic word for "eye", which has its counterpart in the second element of the Lo-lo-p'o compound *me-du* ("eye").²

It was known, of course, that similar formations occur in the present Chinese dialects: thus in Ning-po,

a-tia 阿爹 (likewise in Amoy), father.

a-niang 阿娘 or *a-m* 阿媽, mother.

a-tsi 阿姐, elder sister.

a-me 阿妹, younger sister.

a-ko 阿哥, elder brother.³

a-di 阿弟, younger brother.

a-bo 阿婆, mother-in-law.⁴

Likewise it was known that, particularly in Cantonese, it frequently occurs in connexion with proper names; and

¹ Pelliot, *Bull. de l'Ecole française*, vol. ix, p. 573, n. 1, 1909.

² A. Liétard, *Bull. de l'Ecole française*, vol. ix, p. 553, 1909. The first element, *me*, in the Lo-lo word, is identical with Mo-so *mō* (m'ō), Si-hia *mei*, Tibetan *wig*, Burmese *myak*, Găitsa dialect of Tibetan *muk*, Chinese *muk* 目. Lepcha *a-mik* and Southern Chin *a-mi* are analogous in form to ancient Chinese *a-tu*. A further relationship of the word *tu* (*du*) might possibly be given in the series *ta* of the T'ai languages.

³ Watters (*Essays on the Chinese Language*, p. 396) states that the expression *a-ko* is in very common use among the Chinese as a respectful mode of address. He is quite correct in assuming that, if the same word was chosen for the rendering of Manchu *age* or *agu* (not, as written by him, *agū*), this was partly due to the meaning of the Chinese term. *A-ko*, accordingly, in this case, is not the Chinese transcription of a Manchu word, but the assimilation of a pre-existing Chinese term to the latter.

⁴ C. Arénde, *Handbuch der nordchinesischen Umgangssprache*, pt. i, p. 282.

such names are met with also in Chinese literature.¹ But Maspero is the first to show on the basis of documentary evidence that this phenomenon is an old constituent of the Chinese language, which, thanks to his investigations, is now well traceable almost to the beginning of our era. The case is the more interesting, as this *a-* is the only survival of a prefix in Chinese, and as the same feature is found in a great number of Indo-Chinese languages; and the essential point is that it represents a prominent characteristic of this widely distributed family, and bears witness to the phonetic and morphological relationship of its members.

Burmese was the language in which this peculiar trait was first pointed out by W. v. Humboldt.² He observed that Burmese is capable of forming nouns by the addition of a prefixed *a-*. Schleiermacher, in his *Grammaire barmane*,³ likewise observed the employment of *a-* in the formation of nouns and adverbs.⁴ A. Schiefner⁵ studied the question somewhat more profoundly by drawing upon

¹ For example, *A-yü* 阿玉 (E. Rocher, *T'oung Pao*, vol. x, p. 347, 1899), *A-hung* 阿衡 (Chavannes, *Mémoires historiques de Se-ma Ts'ien*, vol. i, p. 178; vol. v, p. 196); *A-jung* 阿戎, mentioned in *Tsin shu* (see Pétillon, *Allusions littéraires*, p. 274); *A-po* 阿波, mentioned in *Sui shu*, Ch. 51 (Chavannes, *Dix inscriptions chinoises de l'Asie centrale*, p. 28, n. 3). Giles, in his Dictionary, cites *A-hiang* 阿香, as the name of a fairy who assists the God of Thunder by pushing his car. In Mayers (*Chinese Reader's Manual*, p. 1) we read of *A-kiao* 阿嬌, *A-man* 阿瞞 and *A-to u* 阿斗. *Tao-yün* 道韞 elegantly spoke of her uncle as *A-ta-chung-lung* 阿大中郎 (Lockhart, *Manual of Chinese Quotations*, p. 136). Compare also *a-seeng* 阿翁 ("grandfather" or "father-in-law") in Pétillon (loc. cit., pp. 126, 259), *a-kia* 阿家 ("mother-in-law," *ibid.*, p. 259), and *a-p'o* 阿婆 ("vieillard," *ibid.*, p. 418).

² *Einführung in die Kawi Sprache*, p. ccciv.

³ Inserted in his work *De l'influence de l'écriture sur le langage* (Darmstadt, 1835).

⁴ Loc. cit., pp. 144, 244, 256.

⁵ *Mélanges asiatiques*, vol. i, pp. 361-3.

Abor, Luhuppa, Manipuri, and Tangkhul, in which, besides *a*, he met an alternation with the vowels *o*, *u*, *i*, and *e* (*o-mit*, "eye"; *ummah* [Tib. *me*], "fire"; *i-pa*, "father"; *e-lag*, "hand"). It was his further merit to call attention to Tibetan where the prefixed forms chiefly belong to the vernacular, the written language usually being destitute of them—

a-p'a, father (written language *p'a*).

a-ma, mother (w.l. *ma*).

a-žāñ, maternal uncle (w.l. *žāñ-po*).

a-sru, maternal aunt (w.l. *sru-mo*).

a-ne, paternal aunt (w.l. *ne-ne-mo*).

a-bo, elder brother (w.l. *p'u-bo*).

a-rgya, daddy.

a-yas, dear mother.

a-č'e (*a-je*, *a-že*), elder sister.

The relation of these *a*-formations to the written language, accordingly, is the same in Tibetan as in Chinese.

Besides terms of relationship, Schiefner recorded the following words:—

a-čug, ankle-bone.

a-dogs, table.

a-luñ, clasp.

a-lon, circle, ring (Burmese *a-lunh*).

a-roq, companion (from *groqs*, *roqs*).

a-re, a little (also interjection).

a-p'rag, arm (Jäschke: bosom of a garment), from *p'rag-pa*, shoulder.

At present this list may be considerably increased; and we may distinguish the following categories of words into which the prefix enters:—

Nouns denoting relationship

The following additions may be made to Schiefner's list:

a-tā (Balti and Purig), father.

a-k'u, paternal uncle (w.l. *k'u-bo*).

a-jo, elder brother (w.l. *jo-bo*).

a-p'yi, grandmother (w.l. *p'yi-mo*).

a-p'yim, old woman.

a-ban, husband of the father's or the mother's sister.

a-mes, grandfather (w.l. *meš-po*).

a-po, junior husband.

a-k'a, infant (w.l. *k'a-ba*).

Nouns denoting professions

a-č'os-pa (colloquial of Eastern Tibet), a religious man, monk (written language *č'os-pa*, from *č'os*, religion).

a-mč'od, one who recites prayers for compensation outside of the Lamaist ceremonies (from *mč'od-pa*, to offer, to sacrifice).

a-drum, groom.

Nouns denoting bodily parts

a-čug, ankle-bone.

a-ts'om, beard (popularly for *ag-ts'om*; compare A-hi Lo-lo *nī-ts'o*).

a-ra, beard (in Tsang).

a-ku (written *a-sku*), body; used in the Kuku-nör dialect in the phrase *a-ku de-mo* (*bde-mo*), "How are you?"¹

Nouns denoting animals

a-lū (written *a-lus*), in Sikkim *a-li*, or *a-liu*, cat.

a-li-k'ug-ta, swallow.

a-gas or *a-ges*, a fabulous animal.

a-pra, earless marmot.

Nouns denoting plants

a-kar (Sikkim), red pepper.

a-kron, an Alpine plant.

a-ya-eva-ts'od, dead-nettle.

a-rum, a species of garlic.

a-byag, *a-ąbras*, *a-ąbre*, names of medicines.

¹ See Rockhill, *Diary of a Journey through Mongolia and Tibet*, p. 88. T. de Lacouperie (*Les langues de la Chine avant les Chinois*, p. 71) noted that in certain dialects of the Miao tribes of Southern China a prefix *a-* is joined to terms of bodily parts (*a-pu*, hand; *a-t'au*, foot; *a-biu*, ear).

*Nouns denoting articles of food**a-log*, ball of dough.*a-sla*, cake.*a-sam*, thick broth.*a-sbyar*, thin broth.*Other nouns**a-po*, building (only in dBus).*a-ñar*, mirror.*a-kam*, firewood.*a-sgor*, ear-ring.

The prefix *a-* is not so frequent in connexion with proper names as in Lo-lo and Mo-so, but such names occur also in Tibetan. In historical records we meet A-šo-legs, A-roḡ-lde, A-so-lde, A-t'og rkod-btsan. Well-known is the name A-nu, the father of T'on-mi, who was sent by King Sroñ-btsan sgam-po to India in order to frame an alphabet for Tibetan.¹ A tribe of the Golog is known as A-chü.²

The prefix *a-*, further, serves for the formation of adverbs and a few adjectives—

a-ts'ad, a little, as to quantity (from *ts'ad*, measure).*a-ts'e*, a little, as to time (from *ts'e*, time).*a-li*, a little.*a-ts'od*, at present (from *ts'od*, measure, time-measure).*a-ta*, now.*a-nts'ar*, admirably (from *nts'ar*, wonderful).*a-qsar*, newly (from *qsar*, new).

¹ The name A-nu appears as that of an author of two grammatical works in the *Tanjur* (vol. cxxiv, Nos. 2, 3). Schiefner supposed the identity of this A-nu with Anubhūti, which is purely a conjecture unsupported by evidence. True it is that there is also a Sanskrit proper name Anu; but it does not follow therefrom that a Tibetan name A-nu is borrowed from India. On the contrary, it appears as a genuine Tibetan word, being derived from *nu-bo* ("younger brother") in the same manner as, for instance, *a-jo* from *jo-bo* ("elder brother"). There seems also good reason to believe that the Tibetan tradition ascribing the authorship of these two treatises to T'on-mi A-nu (T'on-mi assuming his father's name) is well founded (see Huth, ZDMG., vol. xlix, p. 284, 1895).

² W. W. Rockhill, *Land of the Lamas*, p. 189.

a-gsal-la, openly, manifestly (from *gsal*, clear).

a-rin, to-day (from *rin*, long, with reference to time; compare *de-rin*, to-day).

a-na, *a-k'a*, or *a-ritsa*, here.

a-qdra (pronounced *andra*), thus.

a-sbyar (Old Tibetan), afterwards.

a-run, once more.

a-tan, of course, very.

a-bo-tse, good, tolerable.

a-t'o-ba, beautiful, good.¹

a-yu, hornless (of cattle).

In Eastern Tibet the prefix is combined with the demonstrative pronouns *adi* and *de*: *a-adi* ("this one"), *a-de* ("that one"); also with *ya* ("one of a pair"). A single case is known where *a-* is combined with a verbal form which is an imperative: *a-gyis*. Jäschke interprets this expression only as an interjection—a word of caress used by mothers—but the Tibetan-French Dictionary intimates that it means *veuillez faire*; accordingly *gyis* is the imperative form of *bgyid-pa* ("to do"). This point of view is confirmed by the existence of the prohibitive form, *a-ma-gyis* ("oh! ne faites pas!").²

¹ Jäschke has queried this word with an interrogation-mark. It was derived by him from the dictionary of I. J. Schmidt, who on his part called it from the Tibetan-Mongol dictionary *rTog-par sta-ba*, where it is indeed thus given and rendered by Mongol *ain*. The word presumably belongs to a dialect of Amdo.

² Chandra Das (*Tibetan-English Dictionary*, p. 1342) states that *a-gyis* is "an interrogative pleonastic term signifying: have you done it or done so?" This is possible; in this case, however, *a* has nothing to do with the prefix here in question, but is the interrogative particle *a* largely employed in Eastern Tibet (cf. A. Desgodins, *Essai de grammaire tibétaine*, p. 26). This phrase, accordingly, has no right to be in the lexicon any more than several others listed by Das under separate headings, as though they were independent expressions; as, for instance, *a-t'ul*, explained as "a colloquial expression of doubt as to whether an enemy would be vanquished"; *a-lan*, "hesitation to listen to one's advice"; or *a-drag*, "doubt as to whether a thing is good or bad." In these examples we simply encounter a verbal form or adjective prefixed by the interrogative particle *a*; and they should have been entered under the latter as catchword, which, however, is not given under *a*.

The prefix *a-* is finally employed to a large extent in association with interjections. These will be enumerated below when we come to discuss the meaning of the prefix.

Also in Tibetan the use of the prefix is not a matter of yesterday, but an old affair organically inherent in the language. The wide expansion of the prefix over all dialects, and its frequent occurrence in ancient works of literature (the cycle of Padmasambhava and in *Mi-la-ras-pa*), plainly mark it as an ancient and genuine component of the Tibetan language.

There can be no doubt as to the identity of the Chinese and Tibetan prefixes *a-*. First, they are physically identical, inasmuch as the two have the same tone in common, which is the even high tone. Secondly, their application is the same, both being prefixed to terms of relationship, proper names, and pronouns. Hence we may infer that the origin and the inward significance of the prefix are one and the same in the two languages. This side of the subject will be discussed farther on. In Tibetan the prefix is utilized to a much wider extent than in Chinese; but other languages of the same family, again, by far outrank Tibetan. It seems premature to conclude that in a former period Chinese might have made a proportionately larger use of the prefix and subsequently restricted it; the development may have worked in the opposite direction as well, Chinese approximately representing the original state of affairs, while further progress was gradually effected in Tibetan and allied languages.

In Lepcha we meet a prefix *a-*, the grammatical functions of which are quite apparent.

First, to use the language of our Lepcha grammarians, it is prefixed to verbal roots in order to form substantives and adjectives. It must be observed, however, that the noun character is essentially caused by the affixes *-m*, *-n*, and *-l*.

zo, to eat; *a-zo-m*, food (compare Burmese *tsāh*, to eat, and *a-tsāh*, food).

ryu, to be good; *a-ryu-m*, good.

čor, to be sour; *a-čor*, sour.

nan, to sit; *a-nan*, dwelling.

ti, to be great; *a-ti-m*, large.

t'i, to come; *a-t'i-t*, arrival.

šu, to be fat; *a-šu-m*, fat (adj.); *a-šu-t*, fat (noun).

dzu, to fight; *a-dzu-t*, war, battle.

tu, to be ominous; *a-tu-m*, evil effect of the omen.

hru (Tib. *dro*), to be hot; *a-hru-m*, hot.

kul, to be encircled with; *a-kul*, girdle.

Second, *a-* is prefixed to substantives to form others of a more specified notion or of diminutive comparison.

yel, to be beautiful; *a-yel*, beauty of plumage in cocks and game-birds.

uñ, water; *a-uñ*, water in which meat has been boiled.

vi, blood; *a-vi*, menses.

kuñ, tree; *a-kuñ*, bush.

rip, flower; *a-rip*, flower of cloth.

vyeñ, door; *a-vyeñ*, pass.

mon, medicine; *a-mon*, grain.¹

Aside from these two cases in which a grammatical function is as conspicuous as in Burmese, there are other word formations in Lepcha with the prefix *a-* which do not permit an association with a grammatical category, and which are identical with what is found in Chinese and Tibetan. Thus *a-* appears in connexion with names of bodily parts—

a-fyam, hump.

a-mik (Tib. *mig*), eye.

a-boñ, mouth.

¹ Cf. Col. G. B. Mainwaring, *Grammar of the Rong (Lepcha) Language*, pp. 111-12, Calcutta, 1876, and Mainwaring-Grünwedel, *Dictionary of the Lepcha Language*, p. 439. Grünwedel compares with the first category Burmese *d'a* ("to be hungry")—*a-d'a* ("hunger"); with the second, Burmese *im* ("house")—*a-im* ("shenth"). See also L. Vossion, *Grammaire franco-birmane d'après A. Judson*, p. 22.

a-fo, tooth.

a-ñor (Tib. *s-ñan*, Gurung *nha*, Sunwār *nophā*, Tōto *nānu*), ear.

a-t'yak, head.

a-ka (beside *ka*), hand.

a-tsom, hair (compare Tib. *a-ts'om*, beard).

a-li (Gurung, Murimi, and Sunwār *le*, Magar *let*, Tōto *lebe*, Tib. *lē*),¹ tongue.

a-lim, spleen.

Further, in names of animals :

a-lyu (Tib. *a-lü*, written *a-lus*), cat.

a-lok-fo, raven.

Also in names of plants :

a-tok, a rhododendron.

a-pyōñ } ear of corn.
a-gi }

a-mon, grain in the husk.

a-pi, bark.

a-kok, bark of bamboo.

a-bor, flower.

Even in abstract nouns :

a-pum, origin.

a-pryom, solution of a riddle or problem.

Or in others, like—

a-tit, egg.

a-glē, barrel.

a-nyol, cooking-vessel.

a-fup, crust.

a-lap, carpet.

Finally, as in other Indo-Chinese languages, in terms of relationship :

a-bo, father.

a-mu, mother.

a-num, elder brother (from *nu*, younger brother).

¹ Tibetan *lē*, accordingly, is composed of two elements, *le + ē*, the former being preserved by Gurung, etc., and Si-hia *la* (glossary of Ivanov), the latter corresponding to Chinese *shē* 舌.

- a-nom* (beside *nom*), elder sister.
- a-yu*, wife (from *yu*, woman).
- a-kup*, child.
- a-jōh*, maternal uncle.
- a-ku*, paternal uncle.
- a-nyu*, aunt.
- a-nop*, sister-in-law, etc.
- a-vo*, husband.
- a-zoh*, husband of paternal aunt.

The same phenomenon is met in the language of the Gurung in Nepal:¹

- a-ba*, father.
- a-ma*, mother.
- a-li*, younger brother.
- a-na*, younger sister.
- a-gu*, companion.

In Kanāwari we note *a-te* ("elder brother"), frequently used by the people in addressing one another, *a-yo* ("great grandmother"), *a-i* ("grandmother").²

In regard to the languages in Assam, Sten Konow³ states in general that the prefixes *a-*, *e-*, *i-*, etc., are used in the same way as the corresponding prefix *a-* in Tibetan and most of the Tibeto-Burman languages of Assam, while the peculiar use of the prefix *a-* in Kachin and Burmese seems to be foreign to them. In the *Linguistic Survey of India*,⁴ however, it is stated that the prefix *a-* in Miri and Daila "is connected with the Burmese prefix *a* which is used in the formation of nouns and adjectives, and with the Tibetan prefix *a* in words such as *a-ma*, mother". Again, on p. 616 of the same publication, we read in

¹ Cf. Grierson, *Linguistic Survey of India*, vol. iii, pt. i, p. 183. I do not believe that the *a*, as here marked, is long (cf. also the editor's remark on pronunciation on p. 182).

² Joshi, *Grammar and Dictionary of Kanāwari*, pp. 29, 32, Calcutta, 1909.

³ "Note on the Languages spoken between the Assam Valley and Tibet" (JRAS., 1902, p. 134).

⁴ Vol. iii, pt. i, p. 589.

regard to Digaru, that "the prefix *a-* does not appear to be used in the same way as the prefix *a-* in Kachin and Burmese, in order to form nouns from verbs". On the other hand, again, it is asserted with reference to the language of the Chulikata, a division of the Mishmi, that "a prefix *a* plays a great rôle in the formation of nouns and adjectives" (p. 614). A principal difference between the application of this prefix in the Assam languages and that in Kachin and Burmese, however, can hardly be discovered. In my estimation it is exactly the same, and the latter languages may only claim a higher degree of intensity or a wider extension in its use.

In the language of the Lo-lo we observe the same phenomenon. Father P. Vial¹ has well studied it in the dialect Nyi or Nyi-p'a. According to him it is prefixed to monosyllabic nouns serving to call somebody; for instance, *a-ba* ("father"), *a-ma* ("mother"), *a-pu* ("elder brother"), *a-j'a* ("elder sister," Tib. *a-je*), *a-bu* ("grandfather"), *a-p'i* ("grandmother," Tib. *a-p'yi*), *a-ni* ("aunt," Tib. *a-ne*). Vial terms this prefix *appellatif*, as it is likewise placed before the names applied to children, when consisting of a single syllable; for example, *A-sle*, *A-t'o*.² When such names are composed of two syllables, the prefix *a-* disappears, "parce qu'elle perd son utilité qui est d'appuyer la voix"; for instance, *Mu-sle*, *Tsi-pu*. The latter rule, however, does not apply to terms of relationship, as shown by *a-pu-sle* ("second elder brother"), *a-ba-giai* ("uncle, father's elder brother"). This *a* is further found, as observed by Vial, in connexion with certain other words

¹ *Dictionnaire français-lolo*, p. (21).

² *A-bi* 阿 毗 is known as the inventor of Lo-lo script (Devéria, "Les Lolos et les Miao-tse," p. 7, extrait du *Journal Asiatique*, 1891). The Lo-lo adopt as personal name also the terms of the zodiac under which they have been born, this term being linked with the prefix *a-*; for example, *A-nu* ("born in the year, month, or day of the monkey"), *A-je* ("Mr. Rat-Year"), *A-jo* ("Mr. Sheep-Year"); see P. Vial, *Les Lolos*, p. 37 (Shanghai, 1888, publication of Siccawei).

which are outside of the two categories laid down by him; for example, *a-ne-ma* ("raven"),¹ *a-šla-ma* ("hare"), *a-mu-ma* ("a kind of bean"). In A-hi, another dialect of Lo-lo, *a* is prefixed to adjectives: *a-t'o* ("white"), *a-nye* ("black"), side by side with *t'o* and *nye*.² In the same dialect the prefix *a-* alternates with *i-*: in the place of *a-ba*, *a-mo* ("mother"), *i-ba* and *i-mo* may be said as well, and the employment of these vocalic prefixes is optional.³ In his study of the Lo-lo-p'o dialect A. Liétard⁴ likewise drew attention to the same grammatical feature, giving an abundant selection of examples, in which not only terms of relationship but also names of animals, professions, utensils, etc., appear: *a-no* ("dog"), *a-di* ("worm"), *a-pi-p'o* ("sorcerer"), *a-šō-p'o* ("bonze"),⁵ *a-t'o* ("knife"), *a-tso* ("axe"), *a-to* ("fire"), *a-mu* ("heaven"), *a-do* ("door"). This *a*, he adds, is never suppressed, except in *a-bo* ("father"), *a-mo* ("mother"), and *a-pa* ("cake"). It is employed also in the name of girls; as, for instance, *A-sō* ("the fourth"), *A-lu* ("the sixth"). Finally, the word

¹ A comparative series of this word in the various Lo-lo dialects is given by A. Liétard (Bull. de l'Ecole française, vol. ix, p. 552, 1909).

² A. Liétard, Bull. de l'Ecole française, vol. ix, pp. 290, 294, 555, 1909. In Kachin also the prefix *a-* enters into the formation of colour adjectives; for instance, *a-éyañ* ("black"). Likewise in Thado, which belongs to the group of Northern Chin languages, and is spoken in southern Manipur: *a-rom* ("black"), *a-yeñ* ("green, yellow"; cf. *a-yeñ*, "turmeric," in the same language), *a-boñ* ("white"), *a-ia* ("bright, light"; from *wa*, "to shine"), *a-yiñ* ("dark, dense"); see T. C. Hodson, *Thado Grammar*, pp. 61, 64 (Shillong, 1905). The same feature occurs in Lepcha: *a-nañ* or *a-tyañ* ("black"), *a-bok* or *a-doñ* ("black and white"), *a-dum* ("white"), *a-foñ* ("green"), *a-hyir* ("red").

³ A. Liétard, *ibid.*, p. 289.

⁴ *Au Yun-nan. Les Lo-lo P'o*, p. 217 (Münster, 1913). The premature death of Father Liétard, who died on July 5, 1912, in Chao-t'ung, Yun-nan, before the publication of his important work, is an irreparable loss to science.

⁵ The word *šō* apparently is a Chinese loan-word, derived from 師; and it is particularly interesting that M. Maspero (*loc. cit.*, p. 13) has discovered the Chinese counterpart of the above Lo-lo term in the form *a-šī* 阿師 ("maître, moine"). The affix *p'o* means "male".

a-hi ("man") as the designation of the tribe belongs to this category.¹

A rather extensive use of the prefix *a-* is made also in the Cho-ko dialect, of which we owe to Father Liétard a very valuable word-list in comparison with other Lo-lo dialects and Tibetan.² In Cho-ko we meet the prefix in many words where the other languages are lacking in it—

a-si, gold (literally, "the yellow one," from *si*, "yellow," corresponding to Nyi Lo-lo *še* and A-hi Lo-lo *ša*, "yellow" and "gold"; compare Tibetan *g-ser* from *ser*, "yellow," developed from *ge* (*ke*) + *ser*; Mo-so *ke-se*; Miao-tse *ko*; Si-hia *k'ā* 皆).

a-ko, silver (compare Lepcha *kom*, Mo-so *de-gu*).

a-k'u, iron.

a-ko, fruit.

a-ka, leaf.

a-suñ, onion (analogous to Nyi Lo-lo *a-ts'e* and Lepcha *o-tsoñ*; compare Tibetan *b-tsoñ*, Burmese *krak-suan*,³ Southern Chin *kwet-son*, Chinese *suan* 蒜, "garlic," and *ts'uñ* 葱, "onion").

a-ñi, cat.

a-lom, horse (A-hi Lo-lo *a-lo-mo*; *lo* for *ro*; compare Jyaruñ *mo-rō*, Si-hia *riñ-ro*, Tibetan *r-ta* from *rō-tā*).

a-i, rat.

a-si, monkey.

a-na, raven (A-hi Lo-lo *a-ñe*).

a-ni-ku, beak.

¹ More examples will be found in A. Liétard's "Essai de dictionnaire lo-lo français" (*T'oung Pao*, 1911, pp. 17-21). Lolo *σ-nō* ("milk") is comparable with Tibetan *nu-ma*, Chinese *nou* 牛; Siamese *nom*; *a-ño* ("fish"), with Tibetan *ña*, Lepcha *ño*, Mo-so *ñi*, Chinese *niú*, 牛.

² Bull. de l'Ecole française, vol. ix, pp. 549-56, 1909.

³ Burmese *krak* is doubtless related to Tibetan (written language) *sgog-pa* ("garlic"). Yün-nan Tibetan *gau-pa*, Sang-pan Tibetan *lou-grog* (Potanin, *Tungut-Tibetan Border-Land of China*, vol. ii, p. 395, in Russian). Cf. further Lepcha *sui-gu* ("garlic"), A-hi Lo-lo *šo*, Lo-lo-p'o *šu*, Nyi Lo-lo *še-ma*.

a-é, man (P'u-p'a *é*, A-hi Lo-lo *ts'u*, Lo-lo-p'o *ts'a*, Nyi Lo-lo *ts'o*, Mo-so *zu-du*, Leñ-ki Miao *tsi-ne*, Si-hia *tsu-ni*, Manyak *é'o*, Tibetan *ts'o* suffix of plural).

a-si, blood (A-hi Lo-lo *se*, P'u-p'a *su*, Chinese 血).

a-tsi, oil.

a-dsi, lamp (P'u-p'a *a-teñ* is a Chinese loan-word; and the prefix in connexion with a loan-word is interesting, as it shows that the speakers are perfectly conscious of its use).

a-lóm-je, to ride on horseback (compare *a-lom*, horse).

a-si-bya, yellow (compare, above, *a-si*, gold).

a-n-zya, green.

a-n-bya, red.

As already mentioned, *a-* appears also in combination with the interrogative pronouns, *a-sa* (Nyi dialect) and *a-so* (A-hi dialect), in the same manner as in Chinese *a-shü*. The same phenomenon occurs in the language of the Mo-so: *a-ne* ("who?"), *a-tse* ("what?").¹ In Mo-so, of which we unfortunately possess only scanty vocabularies, we find, moreover, *a-pa* ("father"), *a-me* ("mother"), *a-p'u* ("grandfather"), *a-tse* ("grandmother"), *a-bu* ("elder brother");² further, *a-me* ("chicken") and *a-jö* or *a-yü* ("monkey"); and adverbial formations like *a-ni* ("yesterday") from *ni* ("day"). The interesting documents relative to Li-kiang, translated by Chavannes, supply us with a great many Mo-so names preceded by the prefix *a-*: A-ti, A-ch'ao-tso, A-shui-ch'eng, A-ku, A-tsung, A-liang, A-hu, A-lie, etc.³ The same element enters into

¹ J. Bacot, *Les Mo-so*, p. 59. Mo-so *ne* apparently is identical with Chinese *na* 那, and Mo-so *tse* with Tibetan *ci*.

² Cf. H. Cordier, *T'oung Pao*, 1908, p. 683.

³ *T'oung Pao*, 1912, pp. 611, 614 et seq. It is a feature of particular interest that in the "History of the Yüan" (*Yüan shi*, chap. 61, p. 4) the name A-liang is written *Me-liang*, and the name A-hu *Me-wu* (ibid., p. 569). M. Chavannes explains this word *Me* as a tribal name, the Chinese being in the habit of prefixing to the name of a chief that of his tribe, which was gradually looked upon by them as his family-name. Thus *Me* was exchanged for *Mu*, the name of the Mo-so chieftains of Li-kiang, in 1382, when the latter themselves adopted the Chinese custom of family-names. This point of view is confirmed by Sü

the formation of proper names among the Shan tribes; as, for instance, A-k'ing, A-jung-ho, A-li, A-fang, A-k'o.¹ T. de Lacouperie² has called attention to the fact that a prefix *a-* is linked to proper names in the language of the Chung-kia-tse 仲家子 or Chung Miao 仲苗, which belongs to the northern branch of the Tai group.³

Hung-tsu (1586-1647), who says that all the chiefs of Li-kiang bore the family-name Me from the time of the Han down to the Ming, when T'ai-tsu altered it into Mu. Of course, neither the Mo-so nor the Lo-lo or Tibetans ever had family-names ("Les Lolos n'ont pas de noms patronymiques, ils n'ont qu'un nom personnel," says P. Vial, *Les Lolos*, p. 37); and it is solely Sū Hung-tsu's personal viewing of the matter when he takes Me for a family-name. But is Me really a designation of ethnic value which as such ever had currency among the Mo-so themselves? I venture to doubt it, despite the alternating forms Me-ch'a and Mu-ch'a pointed out by M. Chavannes. What is certain to me is, that the element *me-*, as shown by the *Fūan shi*, is a prefix on exactly the same footing as *a-*; Me-liang is identical with and the equivalent of A-liang. The labial prefixes, *ma-*, *me-*, and *m-* are very frequent in numerous Indo-Chinese languages (*ma-*, for instance, in Lepcha, and in Chulikata and Digaru Mishmi [*Linguistic Survey of India*, vol. iii, pt. i, pp. 614, 616], *me-* in Miri [*ibid.*, p. 589], *m-* in Mija Mishmi [*ibid.*, p. 619], Tibetan, Mo-so, and Lolo); and what is particularly notable, the prefix *ma-* is interchangeable with *a-* in Kachin (Sten Konow, *ZDMG.*, vol. lvi, p. 493, 1902). In this language nearly all personal names are combined with the prefix *ma-* (H. F. Hertz, *Handbook of the Kachin or Chingpaw Language*, p. 37, 2nd ed., Rangoon, 1902). Cf. also A-hi Lo-lo *me-ne* ("cat") with Cho-ko *a-ni* ("cat"). For this reason it is equally probable that at the time of the Mongols there was a period of the Mo-so language when the prefix *a-* could alternate with the prefix *me-*.

¹ C. Saison, *Histoire particulière du Nan-tchao*, pp. 116, 126, 145, 247, 258; see also the Index on p. 277.

² *Les langues de la Chine avant les Chinois*, p. 63.

³ P. Vial (*Les Lolos*, p. 33) states that the proper mode of writing Chung-kia is 重甲; that is, "heavy cuirasses." This is somewhat more sensible; but the chances are that Chung-kia originally had no meaning in Chinese, but that it is the indigenous designation of the tribesmen in question, which the Chinese, *tant bien que mal*, attempted to reproduce in their writing.—It is very curious that a prefix *a-* in connexion with proper names occurs also in Khmer, which belongs to the Mon-Khmer family of languages, that is not morphologically related to Indo-Chinese. M. Moura (*Vocabulaire cambodgien-français*, p. 33) states, "a, devant un nom propre d'homme indique la familiarité, s'il s'agit d'un enfant; il marque le mépris, s'il s'agit d'une personne âgée." K. Himly ("Bemerkungen über die Wortbildung des Mon": *Sitzungsber. bayer. Akad.*, 1889, p. 274) has drawn attention to this prefix in Mon,

Various theories have been brought forward to explain the significance of this prefix *a-*. Steinthal supposed that *a-* of Burmese is identical with Siamese *an* ("matter, something"), as in *an tī* ("what is good"). F. Müller¹ acceded to this opinion; but it is decidedly untenable. Aside from the impossibility of interpreting a Burmese prefix through the medium of a material word of Siamese, this theory does not account for the extensive diffusion of the same prefix in a large number of other Indo-Chinese languages.

It would be very tempting to regard the prefix *a-* in its origin as a demonstrative pronoun. Indeed, it has been taken in this sense by several students of those languages in which a pronoun *a* of that valuation actually occurs. Thus Grierson² observes in regard to Abor-Miri that the prefix *a-* in the demonstrative pronouns *a-da* ("that") and *a-la* ("that portion or thing in sight but not near") is apparently an independent pronoun. He refers for comparison to *a-la* ("there"; literally, "that-in") and *a-lokka* ("therefrom"), adding that a corresponding pronoun *a* occurs in many other connected dialects. As regards Tibetan, Sten Konow³ has advanced the opinion that the prefix *a-*ཨ, which is written with the consonantic letter transcribed by us *a*, seems to be identical with the demonstrative pronoun *a* ཨ of Ladākh and K'ams. However plausible at first sight this view may be, it seems to me, nevertheless, to be exposed to grave objections.

Stieng, and Khmer: Mon *a-kruim* ("boastful") from *kruim* ("to boast"); *a-dak* ("link") from *duk* ("to unite"); *a-gak* ("that one") from *gak* ("this one"). In view of the profound historical influence of Burmese upon Mon, the formation of nouns from verbal roots by means of *a-* in Mon might be ascribed to an impetus received from that quarter; for the rest, however, the entire question requires a special investigation in the Mon-Khmer group.

¹ *Grundriss der Sprachwissenschaft*, vol. ii, p. 352.

² *Linguistic Survey of India*, vol. iii, *Tibeto-Burman Family*, pt. i, p. 595 (Calcutta, 1909).

³ *ZDMG.*, vol. lvi, p. 493, 1902.

The pronoun *a* in the dialects of Ladākh and K'ams is an isolated occurrence, and therefore can hardly account for a phenomenon that affects all Indo-Chinese languages from the mountain valleys of Nepal and Assam to the plains of China. Moreover, the existence of this alleged pronoun *a*, as already intimated by Jäschke,¹ is at least doubtful, and in all probability it rests only on a mishearing for *a a*. It is well known that Tibetan has two different signs for the expression of *a*, which correspond to two strictly differentiated sounds; the one, *a a*, is produced by the opening of the glottis, like the Greek spiritus lenis or the Arabic aliph; the other, *a a*, is a pure vowel, without any admixture of a consonant. The old and regular demonstrative pronoun of the Tibetan language, however, is always *a a* with the variants *e a*, *u a*, *o a* which I have discussed on a former occasion,² but is never *a a*. This being the case, it is improbable, nay, impossible, that the Tibetan prefix *a* should have been derived from the pronoun *a*. Not only are the two physically distinct sounds, represented in writing by two diverse letters, but they differ also in tone, *a* being high-toned and *a* being deep-toned; and high-toned and deep-toned words are not comparable. These two words, accordingly, bear no relation whatever to each other. For this reason I am not ready to accept Sten Konow's theory. It is insufficient also for other reasons: while it would be plausible, for instance, that the prefix *a-* in connexion with terms of relationship might be a demonstrative pronoun, this is not evident in other groups of words, as, for example, in the colour adjectives met in Lo-lo and in Kuki-Chin languages. The theory, consequently, is too narrow, and fails to cover the entire psychology of the case.

In the same article Sten Konow³ develops another

¹ *Tibetan-English Dictionary*, p. 603.

² *T'oung Pao*, 1914, p. 56, note.

³ ZDMG., vol. lvi, pp. 513-4, 1902.

theory as to the origin of the prefix *a-* in the Kuki-Chin languages. In these, terms of relationship are never used in a general, abstract sense, but are always correlated with a distinct individual; that is to say, they are regularly combined with the possessive pronouns: thus in Thādo *ka-pa* ("my father"), *na-nu* ("thy mother"), *a-k'ut* ("his hand"). This pronominal *a* of the third person then became an integral component of the word-stem, and this process was facilitated by the pre-existence of another prefix *a-* identical with the corresponding prefix in Burmese. Sten Konow, accordingly, assumes two different prefixes *a-*, one of pronominal character, and another of word-forming tendency.¹ All this may well hold good for the group of languages visualized by the author, but again we are at a loss as to how to apply this explanation to other Indo-Chinese languages showing the same formative principle. Chinese, Tibetan, and Lo-lo lack a possessive pronoun *a*; and the possible conclusion that these languages might have lost it, merely in view of the fact that it exists in the Kuki-Chin group, would not seem to me to be justified. In consequence of our still imperfect knowledge of Indo-Chinese languages, etymological speculations will remain at present somewhat hazarded, and in the case under review it appears advisable to restrict our attention to the psychological significance of the case rather than to endeavour to unravel the etymological origin.

In examining carefully the list of words which in the various languages are capable of assuming the prefix *a-*, we note that they have a very specific relation, first of all, to the social life of the community, and, second, to the

¹ Examples of the latter kind are cited on p. 492 of his article. Cf. also T. C. Hodson, *Thādo Grammar*, pp. 9, 13. In the *Linguistic Survey of India* (vol. iii, pt. i, p. 575) it is observed that the prefixes *a-*, *ε-*, or *u-* in Aka are probably identical with the possessive pronoun of the third person, while the prefix *aa-* is explained as being perhaps that of the first person.

speaker. They are equivalents of social importance, in which every individual has his share, and which for this reason are somehow emphasized by the speakers. They are (in a different sense, however, from the usually accepted one) terms of endearment; that is, words for persons or objects which have endeared themselves to the individual as a member of the social unit. The terms of relationship are of prime importance in this psychological category. Here it is notable that the *a*-forms are principally employed in addressing persons. *Ma*, in Tibetan, is "mother", anybody's mother, but *a-ma* is exclusively the speaker's individual mother, thus addressed by him in the sense of "dear mother". It is of especial interest to note how the social horizon of these expressions is widened by gradually embracing larger social bodies. Thus *a-jo* (literally "elder brother") becomes the general address for every gentleman ("sir"), and *a-ŕe* ("elder sister") assumes the broader significance of "mistress, madam". *A-ne* ("aunt") widens into an address for nuns. As to their grammatical form, these terms are vocatives; and as to their significance, they imply a tinge of an affectionate state of mind on the part of the conversationalist. This fully explains also why we find the same element in proper names of Chinese, Lo-lo, Mo-so, and Tibetan. It is the name by which a person is called by others to whom he or she is dear (*A-ho*, for instance, "my dear Ho"). Father Vial was guided by a correct feeling when conferring upon the prefix the designation *appellatif*; this word exactly describes what it is. A similar sentiment is evinced by the Tibetan or Lepcha when he calls the cat *a-lü* or *a-lyu* ("kitty"), and here our own diminutive formations spontaneously loom up in our mind. Along this line the Lepcha have further developed the application of the prefix. This foundation being inferred, it is conceivable to me that from the very beginning the element *a* might have had this vocative meaning of endearment,

and that the assumption of a possible interrelation with a pronominal element, be it demonstrative or possessive, at least, is not imperative. I am very much inclined to regard it as an original, spontaneous, emotional nature-sound, very much like our own interjection *ah!* formed with or without a vocative; and the same interjectional *a!* naturally is found also in the Indo-Chinese languages.¹ As such it is met in Tibetan, and also in compounds of interjectional value in which *a* visibly plays the rôle of a prefix:

a-k'a, *a-k'a-k'a*, or *a-k'ag*, exclamation expressive of contempt, detestation, or bereavement (also in the written language). The opposite is

a-la, or *a-la-la*, expressive of joyful surprise (*a-la-la-ho* frequently occurs in the Ge-sar Saga to introduce songs).

a-ggis, a word of caress used by mothers in soothing their babies.

a-tsa, or *a-ts'a*, expressive of pain by touching fire or hot objects (hence *tsa* and *ts'a* in *ts'a-ba*, "heat, hot"; *a-tsa*, "ah, how hot!"), and in general, an interjection of sudden fright or profound regret. The opposite is

a-č'u, expressive of pain from cold, hence name of one of the Cold Hells.

a-na, expressive of grief.

a-ma-na, same.

a-ra-ra, cry of anguish.

a-tsi-ts'i, expressive of regret or repentance.

a-tsi, expressive of wonder.

a-mts'ar, oh dear, what wonder!

a-pi, expressive of wonder on making a new experience.

a-re, well, then!

In these examples the purely interjectional character of the element *a* is plainly obvious. It is equally manifest also that it has the function of a prefix, and that in its quality as a prefix it cannot be identified with a demonstrative pronoun.

¹ In regard to Chinese see Watters, *Essays on the Chinese Language*, p. 136.

A similar series of interjections with *a-* is found in Lepcha,¹ and doubtless occurs in other Indo-Chinese languages.

The same interjectional force of meaning is valid also for the interrogative and demonstrative pronouns. When *a-sui* or *a-su* are said in the place of the plain *sui* or *su* ("who?"), it is evident that a high degree of emphasis is laid on the pronoun; and the same stress we feel in *a-adi* and *a-de* as compared with *adi* and *de*. Thus I am inclined to think that the original vocative and interjectional significance of *a* further developed into that of a strongly emphatic word which in due course became available as a useful vehicle in the formation of words and in expressing certain shades of meaning. At this point we naturally come down to the period when the various speech-groups of the family were separated and scattered over an immense area of land. The word-forming tendency of the prefix *a-* was set in operation after the separation of the various members of the Indo-Chinese, and consequently assumed individualistic features in the single branches of the stock. The interjectional value of *a-*, being in common to all languages, must have been in force prior to the time of separation, and presents the primeval archetype which is responsible for the subsequent, separate developments in the single languages. The formation of the mechanical rule that in Lepcha, Kachin, and Burmese a prefix *a-* forms nouns and adjectives is erroneous. This merely means to view foreign languages in the light of Latin grammar, and to read our own grammatical notions into them, according to the method in which most grammars of Indo-Chinese languages have unfortunately been written. That rule may offer a certain vantage-point to the practical student of a language, but it has nothing to do with scientific observation. The distinction of Lepcha *a-hru-m* from *hru*, for instance,

¹ See the Dictionary of Mainwaring-Grünwedel, p. 440.

does not lie in the alleged fact that the former is a noun or adjective and the latter a verb. These terminological categories are merely artificial constructions of our mind suggested by the word-conditions of Indo-European languages, but it does not mean at the outset that they necessarily exist also in other languages than our own. Certainly, the word-categories in Indo-Chinese are fundamentally different from ours; and the differentiation of noun, adjective, verb, etc., does not by any means reach there that degree of essential importance that it has in Indo-European. The case of *a-hru-m* means to the philologist a word-formation from the stem *hru* by means of the prefix *a-* and the affix *-m*, expressing with greater emphasis and intensity the idea conveyed by the stem *hru*. It could not be immediately inferred from the very character of the language that the one is a noun and the other a verb. This distinction, in fact, is not made by the language itself, but only by us who read the effects of our Latin school-training into a language developed outside of our culture-sphere. Our procedure is the same as though we were to treat the manners and institutions of the Lepcha from the standpoint of Roman law, taking up section by section of the latter and religiously checking it up with what is offered by the Lepcha. He who can break away from the slave-fetters of our grammar and think objectively in a foreign language, will easily recognize that the theories previously advanced on the nature of the prefix *a-* are imaginary, and that the development, as here outlined, so far as this is possible in the present state of our knowledge, truly corresponds with observable data. There are not two prefixes *a-*, as assumed by Sten Konow, but there is only one, reducible to a monophyletic origin, and appearing as a uniform manifestation throughout the group.

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KARAJANG

As is well known, Marco Polo (bk. ii, chap. 48) applies to the province of Yün-nan the name Karajang. Henry Yule, in his classical edition of Polo's travels (vol. ii, p. 72), correctly analysed this word into *kara-jang*, explaining the first element as the Mongol or Turkish word *kara* ("black"), and referring to the "White Jang" (*Tsaghan-Jang*) mentioned by Rashid-eddin. As to the second element of the name, Yule annotated, "*Jang* has not been explained; but probably it may have been a Tibetan term adopted by the Mongols, and the colors may have applied to their clothing." M. Pelliot (*Bull. de l'Ecole française*, vol. iv, 1904, p. 159) proposed to regard the unexplained name *Jang* as the Mongol transcription of *Ts'uan*, the ancient Chinese designation of the Lo-lo, taken from the family name of one of the chiefs of the latter; he gave his opinion, however, merely as an hypothesis which should await confirmation. I now believe that Yule was correct in his conception, and that, in accordance with his suggestion, *Jang* indeed represents the phonetically exact transcription of a Tibetan proper name. This is the Tibetan *aJañ* འཇམ་ or *aJañs* འཇམ་ས་ (the prefixed letter *a* and the optional affix *-s* being silent, hence pronounced *Jang* or *Djang*), of which the following precise definition is given in the *Dictionnaire tibétain-latin-français par les Missionnaires Catholiques du Tibet* (p. 351): "Tribus et regionis nomen in N.-W. provincie Sinarum Yun-nan, cuius urbs principalis est Sa-t'am seu Ly-kiang-fou. Tribus vocatur Mosso a Sinensibus et Nashi ab ipsismet incolis." In fact, as here stated, *Jañ* or *Jang* is the Tibetan designation of the Mo-so and the territory inhabited by them, the capital of which is Li-kiang fu.¹ This name is found also in Tibetan

¹ The Tibetan name for it, *Sa-t'am*, is entered also on p. 1010 of the same dictionary. M. Bacot, in his attractive work *Les Mo-so*, p. 3,

literature; for instance, in the Tibetan historical work *dPag bsam ljon bzan* (p. 4, l. 7). In the valuable index to this book prepared by the editor, Chandra Das (p. xxxvi), it is explained as the "name of a place on the border of China, part of eastern or ulterior Tibet". It is less obvious why the same author, in his *Tibetan-English Dictionary* (p. 452), with reference to the same Tibetan work edited by him, insists on *Jang* being a "place in N.W. Tibet which once formed the kingdom of *Jang*".¹ A conspicuous rôle is played by the country *Jang* in the Tibetan epic romances of King Ge-sar, which are divided into three parts, dealing with Tibetan wars against the Chinese, the Turkish tribes (*Hor*), and the Mo-so, styled *aJang-glin* ("country of *Jang*").² In a printed edition as

transcribes the name *Sa-dam*. It is an interesting case that M. Bonin (*Les royaumes des neiges*, p. 281) heard and rendered it in the form *Sdam*, as this illustrates the formation of a prefixed consonant, a phonetic phenomenon so peculiarly Tibetan (gradual elision of the vowel in the first element of a compound under the influence of a strong accentuation of the ultima).

¹ Again (JASB., 1904, extra No., p. 98), he explains the country *Jang* as Kuku-nôr region and Amdo. He cites also *Sa-t'am* as the "name of a place in K'am" from the writings of the Lama Kluu-rdol, so that there is no doubt that, as correctly stated by the French missionaries, *Sa-t'am* is the adopted form of the Tibetan written language. It is thus written also in the Tibetan Ge-sar Saga.

² This information is usually credited to E. C. Baber (for instance, by T. de Lacouperie, *Beginnings of Writing*, p. 43; G. Deverin, *Frontière sino-annamite*, p. 164; H. Cordier, *T'oung Pao*, 1908, p. 679); but Baber (*Travels and Researches in Western China*, p. 88, in Supplementary Papers, Roy. Geogr. Soc., vol. i, London, 1886) honestly acknowledged that he received this information from Mgr. Biet, Apostolic Vicar of Tibet in Ta-tsien-lu. Indeed, it is forestalled by Desgodins in *Annales de l'Extrême Orient*, vol. ii, p. 133, Paris, 1880, and hence repeated in his book *Le Tibet d'après la correspondance des missionnaires*, 2nd ed., Paris, 1885, p. 309, where the curious transcription *Guiong* for the Tibetan name *Jang* appears, while Baber and his numerous followers wrote *Djiung*. T. de Lacouperie (loc. cit.) stated that *Guiong* is identical with *Djiung*, and from M. Bacot's book (*Les Mo-so*, p. 13) it appears that *Djung*, as he writes, is merely a variant of *aJang* (*Hdjang*). The French missionaries themselves have never explained this diversity of names; in their dictionary (p. 253) they give with reference to the Ge-sar Saga

well as in a manuscript of this work, the name is written with a prefixed *l* (*lJan*), which leads to the pronunciation *Jang* also. This mode of writing was presumably inspired by assimilation to the word *ljan* ("green").

I am under the impression that the Tibetan tribal and geographical term *Jan* (*aJan*) meets all requirements of the case, and that we are justified in identifying with it the second element of the Mongolized formation *Karajang* transmitted by Rashid-eddin and Marco Polo. As pointed out by M. Chavannes (*T'oung Pao*, 1912, p. 615; or in Bacot, *Les Mo-so*, p. 177), the Chinese have conveyed to us the transcription *Ch'a-han Chang* 茶罕章, answering to Mongol *Tsaghān Jang* ("the White Jang"). This name we may carry back to the Yüan period, for in the *Yüan shi*, as likewise observed by Chavannes (l.c., p. 603), it is encountered in the form 察罕章. The Mongol transcription *Jang* of the same name is preserved by Sanang Setsen (I. J. Schmidt's edition, p. 238), who calls the king of this tribe (the time refers to the end of the sixteenth century) *Sitam*, presumably a rendering of the name of the Mo-so capital, *Sa-t'am*. The character 章 is well chosen as the instrument to transcribe the Tibetan word *Jan* or *Jang*; both words perfectly agree in the tone, which is the high tone. If *j* were the initial letter of the Tibetan word, it would naturally be deep-toned: it is protected, however, by the prefix *a*, which renders it high-toned; and the insurance of this result is the essential function of this prefix, which in this case

only the form of the written language, *aJan*s. The attention of future travellers in those regions may be called to this point; it would be interesting to see this possible dialectic change of *a* into *u* confirmed. Independent of the Tibetan studies carried on at Ta-taiien-lu, K. Marx, a Moravian missionary stationed at Leh, Ladāk, read in the Tibetan epic about Ge-sar's wars against the *Jang* (see JASB., vol. ix, p. 116, n. 13, 1891).

marks the tone and precludes the aspiration of the initial media.¹

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THE INDIAN ORIGIN OF THE GREEK ROMANCE

By far the ablest attempt to establish the Indian origin of the Greek Romance is that made by F. Lacôte in a paper included in the *Mélanges d'Indianisme offerts par ses élèves à M. Sylvain Lévi*,² and it is well worth while investigating the case made out for the thesis by this scholar. His paper contains, besides direct reference to his theory, much other valuable matter which admits of less doubt and which need not be considered here.

The distinctive feature of the argument for derivation is the view that the Greek romance borrowed its form from the Indian. It is shown that the Indian Kathā is essentially narrated, not of, but by, the parties to the action, and that this rule produces a curiously involved form of narrative such as may be seen in any of the famous Indian Kathās. These, however, in their elaboration are only developments of the simpler Ākhyāyikā, which can be traced from its simplest form in the *Jātakas* through

¹ At first sight I was almost tempted to recognize the name *Jang* also in the *T'ang Annals*, as T. de Lacouperie (*Beginnings of Writing*, p. 41), following d'Hervey St. Denys, mentions a tribal name *Mo-tchang Man* (thus also Cordier, *T'oung Pao*, 1908, p. 364). In looking up the text in the *T'ang shu* (Ch. 222a, p. 46) I find, however, that this alleged *tchang* corresponds to 裳, which reads *shang*; and *shang* could hardly be taken as the transcription of Tibetan *qJañ*. As regards the phonetic relation of the latter to Chinese *chang*, compare the Tibetan transcriptions *qjam-so* ("post-stage") and *qja-so* ("edict"), reproducing the Mongol words *jam* and *jañ* respectively, which were transcribed by the Chinese *chan* 站 and *cha-so* 札撒 (see Pelliot, *Journal asiatique*, 1913, Mars-Avril, p. 458). The Tibetan transcriptions, presumably modelled directly after the Mongol forms, are again shielded by the prefix *q*, which has neither a grammatical nor a graphic function, but a purely phonetic rôle, safeguarding the initial *j* from aspiration.

² Paris, 1911, pp. 249-304.

stages of greater complexity, as in the *Vetālapañcavimśatikā*, the *Pañcatantra*, the *Daśakumāracarita*, and the *Bṛhatkathā*, which is the earliest example of the Kathā proper in its full complexity, as it afterwards reaches perfection in such works as the *Kādambarī* of Bāṇa. Now in Greek literary theory no such type of literature as the Indian Kathā is recognized: the contrast drawn is between the dramatic and the epic, and though Aristotle recognizes¹ the power of Homer to present his characters as speaking and his superiority to other poets in this respect, he admits that later poets did not develop this side of the epic, and he evidently could not conceive a literary genus of the type of the Kathā. Not until Suidas² do we find the precise description of a romance as *δρᾶμα ἱστορικόν*, a narrative drama.

Now the romance of Antonius Diogenes, *τὰ ὑπὲρ Θούλην ἀπιστα*, of which we have a summary by Photius, is told in the form of a letter to the author's sister, enclosing a copy of a letter of Balagros to his wife Phila. This letter tells of the discovery of a manuscript containing a report by a certain Erasinides of a conversation between the Arcadians Deinias and Kymbas. The story told by Deinias contains sub-stories, that of Derkyllis to Deinias, of Astraïos to Derkyllis, of Mantinias to Derkyllis, of Astraïos to Derkyllis and Mantinias, and of Azulis to Deinias. Not only in this respect does M. Lacôte see the influence of India, but in the letter of the author to Faustinus mentioned by Photius, in which the author made some remarks on his work, he finds a parallel to the prefaces of the *Kādambarī* and the *Harṣacarita*; further, he compares with the notes prefixed to the various portions of the narrative by the author the rule of the *Sāhityadarpaṇa* followed in the *Harṣacarita*, according to which each chapter should

¹ *Poetics*, xxiv, 4: cf. iv, 5.

² Speaking of the *Sphinx* of Ptolemaïos, who lived under Hadrian.

contain a preface of a few stanzas giving a summary of its contents.

In the last two points M. Lacôte makes, it is clear, the error of seeking to prove too much. We cannot prove or even make it probable that these two features existed in any Indian model which could have been used by Antonius Diogenes, nor do the two things correspond. The letter to Faustinus is a natural mode of dealing with a new literary effort by an ambitious author whose aim in it was, it is clear, to explain that the marvels were not invented by himself, but compiled from other works, and the head notes to the books of his romance were given up to citations of the authors who had reported happenings such as he was narrating. The Greek plan is novel in a way quite different from the Indian and perfectly natural in itself, so that to deduce it from India is wholly illegitimate.

The substantial part of the argument must, then, be the similarity of the composition of the main story, not in substance but in form. The question then arises whether there is any evidence of the really complicated Kathā in India at a date before the work of Antonius Diogenes. The answer must be so far in the negative. The *Brhatkathā* cannot be proved to be older than the fifth century A.D. M. Lacôte, indeed, holds¹ that it may be of the third century, and, if the episode of Naravāhanadatta's visit to the Śvetadvīpa, which betrays a knowledge of the Christian cult, be erased as an interpolation, even of the first, and he cites with apparent approval Hertel's view² that the *Tantrākhyāyika* is a work of the second century B.C. But that view is in itself most improbable, and even if the *Tantrākhyāyika* is as old as the second century A.D., which has yet to be proved, there is the obvious fact that the style of narrative in that work could not possibly serve as a model to the style of the

¹ p. 270.

² *Tantrākhyāyika*, Einleitung, i, § 5.

Greek romance of Antonius. Bühler's conjectural date of the *Bṛhatkathā* has never been supported by any evidence and is most improbable. The only possible conclusion to be drawn is therefore—and M. Lacôte admits this¹—that we cannot prove that there existed at the time of the rise of the Greek romance an Indian literary type whence that romance could derive its form.

Secondly, is there no trace of a literary form in Greece whence the Greek romance could spring? M. Lacôte is positive that no such form exists, but this is precisely the point on which he fails to be convincing. Aristotle's theory, so far as we have it, omits to provide for the case of the Platonic dialogue, which is not merely a dialogue but a repeated dialogue, and which is held to have owed its form to the Mimes of Sophron. But, M. Lacôte argues,² the Greeks never used this form for narrative, but only for dialectic. This is, however, clearly in view of Plato himself an overstatement: his example must be recognized as of far greater importance than M. Lacôte will allow. In the second place, we have the evidence of Apuleius, who imitates the style of the Greek romance, when he characterizes the *Metamorphoses*, *ut ego tibi sermone isto milesio varias fabulas conseram*. M. Lacôte explains *milesius* because the work is erotic like the Milesian tales, *sermo* because it is "une histoire en entretiens". But who could possibly accept such a version of the Latin *sermone isto milesio*? The *sermo* must be Milesius, not the subject-matter of Apuleius' work, and Hans Lucas³ is obviously correct in the version "erzählt in Gesprächen wie es bei den Milesiaca üblich ist". It is idle to deny that this proves the early existence of the literary type which in its full development gives us Antonius on the one hand and the *Bṛhatkathā* on the other, just as Apuleius' own work is an existing proof of its reality at an earlier date than we can prove its existence in India.

¹ p. 293.

² p. 274.

³ *Philologus*, N.F., xx, 24 seqq.

It is true that Lucas complicates his case by endeavouring to show, like Rohde,¹ that India borrowed from Greece, and indeed if we were to agree with M. Lacôte that the similarity of literary type was convincing proof of borrowing we would have to accept this view, but it is idle to think that similarity of form is a proof of unity of origin. It is well to realize that similar results may proceed from similar causes, that human faculties in Greece and in India are not materially or essentially incompatible, and that parallelism is as true as derivation.

It remains to notice the subsidiary remarks of M. Lacôte in defence of his theory. To obviate the difficulties of the absence of early evidence of the Kathā in Sanskrit he lays stress on the fact that popular tales were composed in Prākṛit originally, and that they could easily wander from country to country with merchants. Unhappily this argument misses the point. The theory of derivation presumes that the elaboration of the style of the romance of Antonius is due to an Indian model. It is ridiculous to think that merchants carried with them any elaborate framework for these tales; all they could communicate would be stories, and it is impossible to believe that it remained for India to teach Greece the telling of stories in the first person. There is already a perfect example of the romance of adventure and even of love in Odysseus' tales in the *Odyssey*, and the fame of the Milesian tales was spread throughout the west and the east. Both in India and Greece gradually popular tales attained literary form, and the real explanation of the Kathā form of composition and the Greek romance is the same, that they represent the application of literary methods to the tale of popular literature. Similar causes produce similar results, and the fact that the Greek romance is a tale of love and adventure as is the Kathā is due, not to the borrowing of the Kathā, but to the nature of mankind, as

¹ *Der griechische Roman*², pp. 578 seqq., cf. JRAS. 1914, pp. 1163, 1194.

M. Lacôte seems himself to feel when he lays most stress on the argument from manner.

Further, M. Lacôte adduces cases where borrowing of Indian notions appears in details of the stories, for he admits that there is no trace of borrowing of a whole plot or of a substantial portion of one. He also alludes to what he considers the fact of Indian influence on Gnosticism and neo-Platonism as shown by Lassen.¹ But the Indian influence on Greek philosophy is just one of those things which has been most absurdly overestimated even by Lassen, and we are in reality not carried far by such comparisons. No one doubts that there was commerce between Greece and India or that ideas could to a certain extent pass from India to Greece or vice versa, but that is not enough to prove the probability of the borrowing of a literary form; just as the borrowing of Indian drama from the Greek is by no means probable, so that of the Greek romance from the Indian Kathā is not probable. The detailed cases of borrowing are of no importance as showing the truth of M. Lacôte's thesis, for we know that stories and ideas could pass to Asia Minor and Greece. But even so it is not possible to accept all M. Lacôte's examples as cogent. The mysterious herb which cures wounds in three days referred to in the *Aithiopika* is compared with the *vraṇasamrohaṇī* of the Indians, but such plants are a commonplace of folklore and cannot be limited to origin in any one place. The reference in the same work (iii, 12-14) to the immovable eyes of the gods and the feet that do not touch the ground is made out to be "strictement indien", but for this no proof is offered. The idea is one which might easily arise anywhere in the popular imagination, and in India as a general characteristic of gods it is first found in the epic, while there are traces of the doctrine in Iran also. When Theagenes

¹ *Indische Alterthumskunde*, ii, 626 seqq.; iii, 87 seqq.

and Charikles see each other for the first time they recognize each other—*ὥσπερ ἢ πον γνωρίζοντες ἢ ἰδόντες πρότερον, ταῖς μνήμας ἀναπεμπάζοντες* (iii, 5). We are asked to believe that the Indian origin of such details is "criante". This is surely absurd; the idea is a mere commonplace, and critics should not forget that Plato had a doctrine of Anamnesis of which no Greek of education was ignorant. Of course, these may be Indian ideas, but we could not prove them to be such.

Finally, it should be noted that the Greek romance is not, like the Indian, restricted to a definite form. The manner of Antonius is not that of all his successors or contemporaries. This fact, which M. Lacôte admits, he explains by the view that the other authors resorted to more purely Greek methods. In point of fact, the variety shows merely the different resources of the Greek world. Heliodorus narrates in part and also brings his characters before us in dialogue in which they tell of their experiences; Xenophon narrates pure and simple; Achilles Tatius puts the tale into the mouth of Klitophon, but he tells it as if he were an outsider, narrating both what happened to himself and to the heroine. In M. Lacôte's opinion this shows that the Greek has triumphed over the Indian manner; it is more simple to eliminate the Indian element as a reality.

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THE MAGI

Professor J. H. Moulton has argued with much force in his *Early Zoroastrianism* that the Magi were not Aryan, and that there is much in their teaching that betrays an origin neither Aryan nor Semitic, and shows them in the light of an aboriginal priesthood, who appropriated but altered the teaching of Zoroaster. That so radical a view should not readily be accepted is natural, and powerful

arguments against it can undoubtedly be derived from Indian evidence. It must be remembered that the theory, though it has from time to time been mooted, runs counter to the whole evidence of classical antiquity, and that the Magi appear already in the *Yasna* (lxv, 7), and are historically and admittedly the transmitters in later times of the Zoroastrian religion, whether or not greatly modified.

1. Professor Moulton finds support for his view in the name of the Magi, which he correlates with Gothic *magus*, meaning "servant" (apparently via "boy"), Old Irish *mug*, "servant." The Aryan invaders of Media called the former inhabitants serfs, and especially the caste foremost in the resistance; stress is laid in this connexion on the Magian revolt, the popularity of Gaumata with the native population, and the hostility of the Persians to the Magi as shown in the Magophonia. On this view the only Median tribe which sympathized with the Persians would be the Arizantoi, who alone were Aryan in blood, even if others than the Arizantoi were Aryan in speech. But apart from the difficulty of understanding why the Magi should ever adopt this opprobrious name, this etymology is most dubious, and that of Carnoy,¹ which equates the root with that seen in *μηχανη*, *Μαχάων*, brings it into relation also with Gothic *magus* and Old Irish *mug*, and renders the sense "helper", the one who labours to heal and to repel evil, is most appropriate to the functions of the priesthood of the Iranians, for the Indian priest has as a main part of his duties precisely this function.

2. Professor Moulton sees in Jeremiah's reference (xxxix, 3, 13) to a *Rab-Mag* as a Babylonian official, and in Ezekiel's allusion (viii, 17) to worshippers of the sun who used a branch in their worship, allusions to an Archi-Magus, and to the Magi at Jerusalem; and he argues that this is natural only if the Magi were aborigines and not

¹ Carnoy, *Le Muséon*, ix, 129-58.

Aryans. The reference in Jeremiah is not accepted by Semitic¹ scholars, and may be disregarded. That in Ezekiel is wholly insufficient: in the first place the particular form of worship is not attributed to the Magi by Ezekiel or anyone else: according to Professor Moulton it is a natural blending of sun and tree worship, and if this is so might have been practised by any sun- and tree-worshipping tribe, so that to refer the practice to the Magi is wholly needless. In the second place no one really knows anything of the process by which Aryans spread in Asia, and if there were Magi at Jerusalem in the time of Ezekiel we would merely have another fact to add to the sum of appearances of Aryans, not a proof that they were un-Aryan. But so far we have no such fact, for the Avestan bundle of twigs and the cult of the fire are not the rite abominated by Ezekiel, even if they sprung from the same source, which is doubtful.²

3. Stress is laid on the exposure of the dead as un-Aryan, as contrary to the usage of Indo-Aryans and Iranians. But this is to disregard all the evidence. Strabo³ records the usage of the Massagetai, the Bactrians, and the Caucasian Caspii, and of the Indians at Taxila, and Diodorus⁴ ascribes it to the Oreitæ of Baluchistan, and that these were all or nearly all non-Aryan it is quite impossible to prove. It was a practice not merely known to the Pali texts, but, what is decisive, to the early Vedic period, and cannot be set down as anything but Aryan, even if we feel such a usage repugnant to what Aryan morality should have been. It is wholly impossible to prove, then, that⁵ "we may safely regard them as an aboriginal folk, who retained under the influence of

¹ *Early Zoroastrianism*, p. 430.

² In Herodotus (vii, 37) the Magi claim that the moon was *ἡμετέρας* for them, the sun for the Greeks. This does not suit the theory of their being especially sun-worshippers.

³ pp. 513, 517, 520, 714.

⁴ xvii, 103.

⁵ p. 193.

religion usages which were generated in a low state of culture". There is no plausibility in the view that the *ex hypothesi* more cultured Aryan thought fit to trust this servile race with their sacred religion; such a theory is a *tour de force* which requires evidence of a peculiarly convincing kind.

4. It is argued that as Darius claims to have restored sanctuaries (*āyadanā*) destroyed by Gaumata, the Magian, the latter seems to have tried to stamp out the invading Aryan ritual, and very likely Semitic worship as well, to leave the indigenous cult without rival. It is much more probable¹ that the Magian, being a stricter Zoroastrian than the politic king, insisted on destroying temples of non-Zoroastrians, whether Aryan or not.

5. It is suggested that, as Zoroaster was no real dualist, the marked dualism of Iranian religion is due to a mere relic of Magian animism. But the parallelism of the Brahminic division of gods and Asuras shows that the animism is just as likely to be Aryan as aboriginal.

6. Stress again is laid on the Persian practice of burial followed by the Achæmenians, and its contrast with the thunders of the *Vendidad* against defiling the earth or water by contact with a corpse. This, however, merely proves, as other evidence shows, that the Magi were not able to make their views generally prevalent in early times, a fact which is wholly undisputed. It may be added that we do not know what Zoroaster's own view on this point was.

7. The next argument for the un-Aryan character of the Magi is based on their advocacy, in which they did not win popular acceptance, of next-of-kin marriages. The evidence for the custom and the propaganda is of doubtful antiquity: Xanthus's² notice is of uncertain value, and Herodotus (iii, 31) merely records that before Cambyzes

¹ So Hommel, *Geographie und Geschichte des alten Orients*, p. 201.

² Ap. Clem. Al. *Strom.* iii, 11.

the Persians were not wont to marry their sisters. It is believed by Bartholomae¹ that Hutaosa, the wife of Vishtaspa, the royal patron of Zoroaster, was also the king's sister, as the Pahlavi tradition certainly held. But whatever the evidence for the antiquity of the custom, the attempt to prove it un-Aryan is quite hopeless. The action of Cambyses is in harmony with the undeniable fact that in Vedic mythology Yama and Yami are the primæval twins who bring forth mankind. Just as Yami woos Yama in the Veda, so in a Pahlavi text² Yimак woos Yim, and there can hardly be any more convincing case of a conclusive parallelism evincing an Aryan belief.³ No reasonable interpretation will accept the view suggested by Professor Moulton that the Vedic hymn is an attack upon a custom known to prevail in some neighbouring race, closely akin to the Magi. At this rate anything could be proved for the Veda.

8. Stress is laid on the fact that the Magi were magicians and interpreters of dreams, and addicted to astrology, whereas Zoroaster stood aloof, as shown in the Gathas, from such things. This fact has clearly no cogency as a proof of un-Aryan origin, but it is alleged that the Parsi view of the planets as malign can only be aboriginal, as it is not Semitic or Aryan, for Aryans "assuredly never saw demoniac features in 'sweet Hesper-Phosphor' or the splendid Jupiter".⁴ But the Indians regularly talk of nine Grahas which include the planets, so that to dogmatize as to Aryans is unwise.

9. Again, the Magi are credited with a dislike of mountains which are to be smoothed out when the regeneration comes, and as the mountains were sacred for

¹ *Altiranisches Wörterbuch*, 1822.

² SBE. xviii, 418, 419.

³ It is perhaps right to point out that the attempt to use this sort of marriage as a proof of Iranian origin (JRAS. 1915, p. 400) is wholly illegitimate.

⁴ p. 213.

Semites and Aryans alike another aboriginal trait is seen. But the Indians of the epic believed in the primitive level character of the land of the blessed Uttara Kurus, as did also the Jains in their turn of the original state of the earth, and the Iranian idea can hardly therefore be deemed un-Aryan.

10. The ritual is ascribed to the Magi, and not to Zoroaster. Probably this separation of elements is too stringent, but the ritual is certainly not un-Aryan in spirit or detail. It has indeed much to parallel it among the Central African tribes; but that is not the point, as religious practices of the lower types are widespread throughout the world. What is required is some proof that no Aryan people practised the Iranian usages, and this Professor Moulton very wisely does not even attempt.

11. It is suggested that the Magi had no original belief in immortality, or at least individual immortality, and the book of *Tobit* is traced¹ in a very ingenious but also unconvincing manner to a Magian original which did not recognize immortality. Unhappily, against this ingenious creation must be set the admission that the Jewish adaptor may have omitted the doctrine if it was there originally, and the fact that Theopompus already records the Magian belief in immortality. The practice of destroying the body is, of course, no argument against immortality: the Indians who burned the dead believed in a bodily existence in heaven.

12. As the Behistan rock has inscriptions in three languages, it is suggested that the Magi spoke a non-Aryan tongue, the Arizantoi being the aristocratic governing class only, that this class was akin to the dominant Aryan element in Persia and Elam, and ultimately akin to the Dorian and Achaian, being in final analysis German in character. This migration is thought² to have passed round the north end of the Caspian after a characteristically

¹ pp. 332-40.

² p. 5, n. 1.

rapid march from their first home, whence they entered the land north of the Panjab. The extension of Aryan speech normally ends with Media, where the Magi checked the Aryan penetration. This is very ingenious, but rests on nothing but conjecture, and stands in flat contradiction with the fact that the historical Magi always used an Iranian speech.

The evidence for an un-Aryan origin of the Magi is thus in the extreme weak, and the hypothesis must be dismissed as untenable. It is rather surprising that Professor Moulton should not have adopted instead a view which he suggests¹ in another connexion, that the Gathic community was in some degree different from the Iranian, the argument being based on linguistic grounds. This would explain the Iranian character of the Magi, and give a ground for their differences from Zoroaster. But it is very doubtful if any such ground as an ethnic divergence is required to explain these differences. It must be remembered that our knowledge of Zoroaster's own views rests on the belief that the Gathas present his views and even his words, and that they represent them exhaustively, so that diverging views in other parts of the Avesta are not Zoroastrian. Further, we must assume that we understand the real sense of the Gathas sufficiently to be sure of the views of Zoroaster. All these assumptions are open to serious objections; the Gathas are extraordinarily difficult to understand, as can be seen from the extremely different versions given by the interpreters, such as Mills, Geldner, and Bartholomae, and we are repeatedly left in the dark as to what Zoroaster did or did not hold. But when we do arrive at some idea of his system, we cannot possibly see in it anything but such a deviation from the Iranian faith as might easily be explained by individual genius, perhaps aided by locality. The real parallel to Zoroaster's position in Iran is that of

¹ p. 26, n. 1.

the great teachers of India, such as Yājñavalkya, Mahāvīra, or the Buddha. These men in various ways altered and changed the views current in their time, and their doctrines had various fates. So it was with Zoroaster: his doctrine was taken up by the priestly caste, of which later tradition asserts he was one, as we may well believe in the absence of any evidence of any sort against what is the natural explanation of his position. That Zoroaster did not recognize a priestly class is really incredible.

Professor Moulton is inclined¹ to accept a theory that the Boghaz Keui gods may represent a migration from India, and he adds to this view the suggestion that the *Tishtrya Yasht* really celebrates the breaking of the south-west monsoon as observed at Delhi at some period before 900 B.C., because that *Yasht* mentions four stars as regents which are identified with Sirius, the Great Bear, Vega, and Fomalhaut. This, however, is a wild extravagance: so long as the extraordinarily feeble character of the Vedic knowledge of the heavens remains undeniable, it is most improbable to trace to Delhi this observation. The theory rests on the view that a time must be found at the heliacal rising of Sirius when all four stars would be visible coincident with the monsoon. The *Yashts* belong to the post-Gathic period of literature and cannot be dated before about 350 B.C., as Professor Moulton admits.² There is absolutely no trace of the four regents before the *Yasht*. It is perfectly obvious that we have here as often an attempt to use astronomy to prove what it cannot do, and that it is absurd to assume that an observation only possible at Delhi in 900 B.C., or earlier, is recorded for the first time in an Iranian text of 350 B.C.³ or later. The absurdity is even

¹ p. 26.

² p. 22. Personally I doubt whether they are by any means as old.

³ The divergent opinions of Professor Moulton's authorities indicate their lack of value: see pp. 24 seqq.

greater on Professor Moulton's own suggestion that the observation was carried by the migration which reached as a limit Boghaz Keui, for that takes us to about 1400 B.C.

It is difficult to take any more seriously the suggestion that the Gaotema of Yasht xiii is Gautama, the Buddha, and that the work was written in the fifth century B.C. and attacks Buddhism. The sole point of contact with Buddhism is the name, and the sole support is a reference to Darmesteter's assertion that Buddhism had established a footing in Western Iran as early as the second century B.C., whence it is deduced that Buddhist emissaries might have appeared at an earlier date. The identity of name is not proof of anything. Gotama is a Vedic name, and Bartholomae leaves the identity of the Iranian Gaotema undetermined, as is the only possible course. If it were admitted we would have a deliberate falsehood to ascribe to the Yasht, for no one can believe that the Buddha was carrying on propaganda in Iran, and Gautama cannot mean "a Buddhist". The statement regarding Darmesteter is unsupported by any reference: it appears to be a mere slip; the real statement of Darmesteter and its lack of any ground are explained by Professor Garbe.¹

On the other hand, it is impossible not to agree heartily with Professor Moulton in the view² that the traditional date of Zoroaster is very difficult to reconcile with the evidence of the Veda. The extraordinary close parallelism of the language of the Gathas and of the Veda is very odd if the first represents a period about 600 B.C. The most prudent conclusion seems to be that the date of Zoroaster must be carried up some generations at least and that the date of the *Rgveda* must not be unduly exaggerated. The former view would be proved if the Mazdaka of Media of 715 B.C. were only to be explained

¹ *Indien und das Christentum*, pp. 296-2.

² pp. 18 seqq.

by the Ahura Mazdāh of Zoroaster, but the reference in an inscription¹ of Assur-bani-pal to Assara Mazāš, until it can be explained away, seems conclusive proof that Asura Mazdāh is older than Zoroaster, and incidentally supports the view that Zoroaster was less of an innovator than might be gathered from his fame.

A. BERRIEDALE KEITH.

THE DYNASTIES OF THE KALI AGE

The only points in Mr. Pargiter's last note on the Dynasties of the Kali age² which have not already been adequately disposed of in my previous notes³ are two questions of syntax: with a brief note on these more objective matters I conclude my criticism of his theories.

1. Mr. Pargiter asserts that *bhaviṣye kathitān* cannot mean anything but "in the Bhaviṣya Purāṇa". That is wholly unjustifiable: the sense "in the future" is perfectly in place: the kings are told of as kings in the future. That some preferred the simpler *bhaviṣyān* for *bhaviṣye* is a clear proof that the sense was taken by them as it is taken by me, and not as taken by Mr. Pargiter, who forgets that critical scholarship demands that variants for *ex hypothesi* perfectly simple readings should not be ignored but accounted for, and that we can no longer act on the happy-go-lucky principles of editing and translating of the older generation of Sanskritists.

2. Mr. Pargiter complains of my not treating *Bṛhad-devatā*, i, 28, and iv, 32, in the same way as cases of the nominative for the accusative. The answer is that these seemingly similar anomalies, when closely examined, prove to fall under quite different categories. iv, 32 belongs to a class of cases which can and must be explained by a normal grammatical rule, and to treat it

¹ See Hommel, PSBA. 1899, p. 132.

² JRAS. 1915, pp. 516-21.

³ JRAS. 1914, pp. 1021-31; 1915, pp. 328-35.

as irregular is, in view of the parallel passages which have been adduced by me¹ and not disputed by any scholar, now impossible. i, 28 is wholly different, and if the reading is correct is a real case of nominative form used for accusative. Now, if Mr. Pargiter will investigate usage, he will find that he can parallel from the later Vedic and epic periods a case like *hetavaḥ* as acc., but he will search in vain for a parallel to *parokṣatā bhrātaraḥ trayāḥ*. But Mr. Pargiter's argument is not to be regretted, however wrong. He contends that *Māgadha-rājāno bhavitāro vadāmi te* is not Sanskrit, but is Pali, and that the dynastic account was therefore not originally written in Sanskrit. He finds a precise parallel in the *Bṛhaddevatā*, iv, 32. This fact can be interpreted in one way only: either we must admit a Pali original of the *Bṛhaddevatā*, which no competent scholar will ever do, or we must admit that Mr. Pargiter's argument in the case of the dynastic account is wrong. There is no escape from this dilemma.

A. BERRIEDALE KEITH.

THE ZOROASTRIAN PERIOD OF INDIAN HISTORY

Dr. Spooner having invited me to make some observations on the proof of his second paper, I have the pleasure to comply briefly with his request. Full discussion of his somewhat daring speculations would require a book.

I agree with the proposition (p. 71) that "Persian influence in early India is no hypothesis at all". It is a fact, to which I drew attention so far back as 1905 (*Ind. Ant.*, 1905, p. 201). Whether or not the Maurya dynasty was one "of almost purely Persian type" (p. 72) may be considered doubtful in the present state of the

¹ JRAS. 1906, pp. 430-2, and Speyer there cited. So also in Greek, Kühner-Gerth, ii, 353, 354. The quotation of commentators (above, p. 516, n. 2) as authorities for grammatical usages is of no value whatever.

evidence. Dr. Spooner's papers add considerably to that evidence, and he may prove to be right. I think he has proved that the Kumrāhār building on which he is at work was copied from a Persepolitan original.

It is better for me to say nothing about the etymological speculations, with which professed philologists are more competent to deal. Punch-marked coins (p. 411) come within my province. I dealt with the subject at considerable length in the *Indian Museum Catalogue*, 1906, which does not seem to have been in Dr. Spooner's hands when he wrote the essay to which he refers, published in 1909. He now (p. 412) identifies the branch symbol with the Zoroastrian *hom*. Formerly he took it to represent the Buddhist *bodhi* tree. Symbolism assumes such an infinite variety of meaning that either interpretation, or both interpretations, may be right. Perhaps, the *hom* allusion is the more probable.

As to the so-called *chaitya* (*caitya*) symbol, the use of the term goes back to James Prinsep (*Essays*, ed. Thomas, i, 214). It is prominent on Āndhra coins besides the classes named by Dr. Spooner (p. 413). He states that Mr. R. D. Banerji tells him that this device is used as a symbol "of a certain Tirthankara", and is still designated by the Jains as "Mount Meru". He does not name the Tirthankara, but probably he is Neminātha, to whom the Gīrnār mountain is peculiarly sacred (Stevenson, *Notes on Modern Jainism*, Blackwell, Oxford, 1909, p. 52). The shrine of Neminātha is the largest and perhaps the oldest temple on Gīrnār. I cannot find any trace of the identification of Gīrnār with Mount Meru.

I am disposed to agree with Dr. Spooner that the *caitya* symbol is a conventional representation of a hill. The punch-marked coins sometimes show a peacock perched on it. The interpretation as a hill seems to suit all classes of coins. The symbol is often associated with a curved line, presumably meaning a river.

I am now much inclined to believe that many of the symbols on the early coins were intended to refer to the Jain religion, which probably is older than the Buddhist. The rhinoceros is especially significant. It occurs on Nos. 48, 58, and 59 of my *I. M. Catalogue* (p. 132, pl. xix, 5, 6). The animal is the emblem of Śreyāṃśanātha, the eleventh Tirthankara, and does not seem to be used as a symbol by either Buddhists or Brahmanical Hindus.

The dog on the *caitya* (Theobald, p. 212, fig. 49, in JASB., part i, vol. lix, 1890) suggests either Zoroastrian or Tibetan influence. I may remark in passing that there was much more of the latter in ancient India than is generally recognized.

The reference to Jain symbols on coins leads me to observe that speculations about the origin of primitive Buddhism, by which I mean "Buddhism before Buddha", cannot be dissociated from consideration of Jainism, which may well be still older.

Dr. Spooner boldly affirms (p. 429) that "Chandragupta [Candra-] was a Parsi", and (p. 453) that "Buddha was a Persian". Again, he states that "Buddhism . . . stands for the spiritual acclimatization of a section of the domiciled Iranians" (p. 455). Those propositions need examination which cannot be attempted now. I only utter the caution that the Jain problem is closely associated with the Buddhist one. A great mass of tradition connects the early kings of Magadha, whether Śaiśunāga, Nanda, or Maurya, with Jainism.

VINCENT A. SMITH.

MALAVA-GANA-STHITI

This will be, I hope, my last contribution to this unprofitable discussion, in which, indeed, I would not have taken part at all, but that Dr. Thomas, in starting it,³

³ JRAS. 1914, p. 413.

did not state rightly something that I had said.¹ At any rate, if he should say anything more, I do not contemplate making any further rejoinder.

No one wishes, as far as I know, to deny that the Sanskrit word *gaṇa* and our word 'tribe' have certain special meanings, according to the context. But I think that many people would agree with me in disputing that *jāti*, which has now been brought on the scene (p. 534 above), is the only, or even the best, rendering of 'tribe'. However, the question here is simply whether *gaṇa* in expressions in which it is coupled with names of peoples may be appropriately rendered by 'tribe'; the word 'tribe' being taken in its customary general sense, which seems to be that of a body of people, mostly of the same original stock, governed by the same laws and customs, and usually dwelling in some particular territory but in some cases leading a nomadic life.

A special merit of Monier-Williams' Sanskrit-English Dictionary, which presents 'tribe' as a meaning of *gaṇa*, is that it gives so good a choice of English renderings of the Sanskrit words. The assertion that a citation of that dictionary "will have no weight with any scholar of Sanskrit" (p. 534 above) speaks for itself. And so does the proposition that we are to reject a meaning given in it because that meaning is not found in the St. Petersburg Lexicon, when we bear in mind that the lexicon was made some forty years earlier.

Dr. Thomas has challenged me now to adduce "any passage from Sanskrit writing where this meaning [viz. 'tribe' for the word *gaṇa*] is either authorized or appropriate."

¹ In a footnote (p. 535 above, note 3) he now seeks to disclaim having "misrepresented" me. I did not use that term; but certainly "it will be seen upon inspection" by any careful reader that, whatever he may have "intended", he distinctly did misrepresent me (as he puts it) in connection with my original rendering of the expression *Mālava-gaṇa-sthiti*.

We have such a passage in the Raghuvamśa, 4. 77,¹ where Kālidāsa, describing the *digvijaya* or tour of conquest of Raghu and mentioning the various peoples whom he subdued, and having brought him to the point when he invaded the Himālaya range, says :—

Tatra janyaṁ Raghōr=ghōraṁ parvatīyair-gaṇair-abhūt ।

Mr. G. R. Nandargikar in his translation below his edition of the text has rendered this line by :—"There a terrible battle ensued between Raghu and the mountain-tribes."²

So, also, Mr. Sh. P. Pandit in his edition of the poem explained *parvatīyair-gaṇaiḥ* by :—"With the mountain-tribes."³

Further, Mallinātha in his commentary, in which he explained *gaṇaiḥ* by *Utsavasamkēt-ākhyaiḥ saptabhiḥ saha*, quoted from the Mahābhārata, 2 (Sabhā). 1025, in its account of the *digvijaya* of Arjuna :—

Gaṇān=Utsavasamkētān=ajayat=sapta Pāṇḍavaḥ ।

And Protap Chandra Roy's translation (Sabhā, p. 81) has rendered this by :—"The son of Pāṇḍu brought under his sway the seven tribes called Utsava-sanketa."

In my opinion, no sensible person could hesitate to use 'tribe', in its general sense and without any special technical implication, as the most natural and appropriate rendering of *gaṇa* in these two combinations and in any similar ones, including such expressions as *Mālava-gaṇa* and *Yaudhēya-gaṇa*.

It may be added that neither of the two passages which I have cited, nor any similar one, is referred to under *gaṇa* in the St. Petersburg Lexicon. This deficiency is quite enough to account for that work not including 'tribe' among the meanings of the word.

J. F. FLEET.

¹ I am indebted to Mr. Fargiter for this reference.

² Second ed., Bombay, 1891, p. 95.

³ Second ed., Bombay, 1897, Notes, p. 38.

A NOTE ON THE BHABRA EDICT

Among the edicts of King Aśoka, the one that is said to have a direct bearing upon the literary history of ancient Indian Buddhists is now known as the Bhabra edict. It was found amidst the ruins of two monasteries near the ancient town of Bairat in Rajputana.

Ever since its discovery and decipherment scholars have made use of it as a rare historical document, which conclusively proves the existence of the Buddhist canon in the third century A.C., in the same form, and with almost the same titles to its different passages, as we have now. Many distinguished scholars from the time of Captain Burt have tried in succession to establish a correct interpretation of its text. Thanks to their labour and erudition we are beyond doubt now much nearer the truth, although it must be admitted that there is room enough left for further researches. Under these circumstances I may hope that a note which I prepared some time ago on this edict will not be out of place.

The initial difficulty to be overcome in connexion with the study of this edict relates to the punctuation of its text. As far as this point is concerned, the following reading may be helpful:—

(1) Piyadasi leḥā Māgadho saṃghaṃ abhivādemā naṃ āhā[:] apābādhaṃtaṃ ca phāsu-vihāyataṃ cā[.] (2) Vidite ve bhaṃte āvaṃtake hāma Budhasi dhaṃmasi saṃghasitī gālave caṃ pasāde ca[.] E keṃci bhaṃte (3) Bhagavatā Budhena bhāsīte saṃ se subhasīte vā(.) e cu kho hamiyāye diseṃṃ "hevaṃ sadhaṃme (4) cīlatthitike hāsati" ti alahāmi hekāṃ ta vitave imāni bhaṃte dhamma-paliyāyāni[:—] Vinaya-samukase (5) Aliya-vasāni Anāgata-bhayāni Munigāthā Moneya-sūte Upatisa-pasine e ca Lāghulo (6) vāde maṃsāvādaṃ adhigicaya Bhagavatā Budhena bhasīte[.] Etena bhaṃte dhamma-paliyāyāni icchāmi (7) kiṃti bahuke bhikkhupāye ca bhakkhuṇīye cā abhikkhinaṃ sunāye ca upadhāleyu ca

(8) *hevaṃ meva upāsakā ca upāsikā cā* (.) Eteni bhaṃte imaññi likhāpayāmi abhihetāṃ ma jānaṃ ti.

N.B.—M. Senart puts a full-stop after *hekaṃ* in line marked (4), and does not consider the sentence to be complete with *bhāsīte* in line marked (6). I prefer not to take *tavitave* as being one word (Inscriptions de Piya-dasi, iii, 198-9).

Pali Form

Piyadassi rājā Māgadho¹ saṃghaṃ abhivādeyyamāno² āha: "appābādhattaṃ ca phāsu-vihārattaṃ cā (ti). Veditabbo bhante yāvatako amhaṃ Buddhasmiṃ dhammasmiṃ saṃghasmiṃ gāravo ca pasādo ca. Yaṃ kiñci bhante Bhagavatā Buddhena bhāsitaṃ sabbaṃ taṃ subhāsitaṃ eva. Yaṃ ca kho abhiññāya³ deseyyaṃ—'Evaṃ sad-dhammo ciraṭṭhitiko bhavissatiti'⁴ arahāmi ekanta vedittabbāni (vattabbāni vā) imāni bhante dhamma-pariyāyāni [seyyathidaṃ:] Vinaya-samukkaṃso Ariya-vāsāni⁵ Anāgata-bhayāni⁶ Munigāthā⁷ Moneyya-suttaṃ⁸ Upatissa-paṇho, yā ca Rahulovāde⁹ musāvādaṃ adhikicca Bhagavatā Buddhena bhasitaṃ. Etāni bhante dhammapariyāyāni icchāmi: kinti bahukā bhikkhavo ca bhikkhuniyo ca

¹ I fully agree with Dr. Bloch in taking *Māgadho* in the nominative, agreeing with *leḍḍa*, and not in the accusative, agreeing with *saṃghaṃ* (Mr. Vincent Smith's *Asoka*, 2nd ed., p. 153). Cf. "Rājā bhante Māgadho Ajātasattu vedehiputto bhagavato pāde sirasā vandati, appābādhāṃ . . . phāsuvihāraṃ ca pucchatitī Evaṃca vadehī . . ." (*Mahā-parinibbāna-suttanta*, P.T.S., D. vol. ii, pp. 72-3).

² Also *abhivādīya nam* and *abhivādeyyamāna*.

³ Cf. "Abhiññāya ahaṃ bhikkhavo dhammaṃ desemi", quoted in the *Kathāvatthu*, p. 361. Cf. *Dīgha-nikāya*, i, 12; *Aṅguttara*, ii, 1, etc. In the *Rig-veda*, also in Pāṇini, *ahamyā*, "egotistic," occurs as an adjective derived from *ahamyati*, "he is egotistic." A noun of quality to this, Dr. F. W. Thomas seems inclined to think, would be *ahamyā*, "egotism" = *asmā*, of which *hamīpiye* would be instrumental—"with egotism" or "presumptuously".

⁴ Cf. Pali future forms of *√bhū* (to be) such as *hevaṃti*, *hohīti*, *hehīti*.

⁵ The *saṅgīti-suttanta*, *Dīgha-nikāya*, vol. iii.

⁶ The *Aṅguttara-nikāya*, iii, 103-8.

⁷ The *Sutta-nipāta*, 206-29.

⁸ The *Itivuttaka*, 67; *Anguttara-nikāya*, i, 272.

⁹ The *Majjhima-nikāya*, i, 414-20.

abhiñham suneyyūñ ca upadhāreyyūñ ca ; evam eva upāsakā ca upāsikā cā (ti). Etena bhante imaṃ likhāpayāmi abhihitāñ¹ (adhippetam va) me jāneyyan ti."

Translation [from the middle of the line (3) to the middle of the line (6)]

" Were I to recommend, however, any particular passages from my own knowledge and experience [with a view :]—' Thus the sublime Law will long endure.' I would consider these to be, venerable sirs, the ' sacred texts ' which deserve to be indispensably learnt (or mentioned), viz.:

- (1) The Vinaya-samukasa—Excellent treatise on Vinaya—moral discipline ;
- (2) The Aliya-vasāni—Ways in which Āryas, spiritually advanced Buddhists, live or should live ; modes of ideal life ;
- (3) The Anāgata-bhayāni—Dangers threatening the church and the doctrine ;
- (4) The Muni-gāthā—Poem on ' who is an hermit ? ' ;
- (5) The Moneya-sūta—Discourse on quietism ;
- (6) The Upatissa-pasina—Questions of Upatissa ; and
- (7) What was spoken by the Blessed One in his ' Admonition to Rahula ' concerning falsehood."

A word must be said with regard to the identification of passages referred to in the edict. I should add in this connexion that, so far as the identification of Nos. (2), (3), (4), (5), and (7) by Professor Rhys Davids goes, I have nothing to say against it. Hence there are just two controverted passages which I propose to discuss here. These are (1) Vinaya-samukasa and (2) Upatissa-pasina.

1. *Vinaya-samukasa*.—Professor Rhys Davids doubts if the name were meant to indicate any distinct text. " There is a word," he says, " at the commencement of the

¹ Sans. Abhihitāyām.

list which may either be an adjective applied to the whole list, or the name of another passage."¹ With all deference to his opinion, I am inclined to believe that there is perhaps no reason for doubt. It was obviously meant as a title to a passage or to passages. The question, then, arises how it may be identified.

I presume that the word which causes doubt is "samukasa", being the equivalent of Pali *sāmuḥkaṃsa* or *sāmuḥkaṃsika* (= *uttama*, excellent).² It is surely not a verbal noun as Mr. Vincent Smith supposes it to be when he translates the word by "exaltation". "Exalted" would be the right word, not "exaltation".

The phrases like "*sāmuḥkaṃsikaṃ pañhaṃ*"³ and "*sāmuḥkaṃsikaḍḍhamma-desanā*"⁴ are to be found both in the Nikāya and the Vinaya texts. Unfortunately, nowhere does an expression like "*sāmuḥkaṃsiko dhammo*" or "*sāmuḥkaṃsiko vinayo*" occur.

Granted, however, that the name "Vinaya-samukasa" was used for "The excellent treatise on Vinaya", what particular passages might, in the opinion of King Aśoka, be worthy of the name?

Two texts naturally suggest themselves, to wit, (1) the Pātimokkha and (2) the Sigālovāda-suttanta (D.N. iii, 180-94).

If a monk were the person who drafted the edict by using his own discretion, the Pātimokkha would have been, without doubt, the text that would claim such a high consideration from him. But it should be borne in mind that in this case whoever might be the writer, a monk or a state officer, he was bound to be guided by the king's discretion.

In the latter case, the Sigālovāda-suttanta seems to have some advantage over the Pātimokkha.

¹ *Buddhist India*, p. 170.

² See Indices, *Aṅguttara-nikaya*, v, p. 366.

³ *Ibid.*, v, p. 195.

⁴ The Vinaya-pitaka, edited by Dr. Oldenberg, vol. II, p. 156.

We are told in the commentary of Buddhaghosa on this suttanta: "Imasmim pana sutte yam kiñci gihi-kattabban kamman nāma tam akathitam n'atthi ti Gihi-Vinayo nāma yam suttanto tasmā inam sutvā yathānusiṭṭham tathā patipajjamānassa vuddhi yeva pāṭikaṅkhā no parihānīti" (India Office MS., P.c. 25, D.N., pt. 333, Atthakathā).

"In this sutta there is left nothing undescribed that constitutes the whole duty of a householder. The Suttanta is therefore entitled Gihivinayo—'The institute for the householders.' Wherefore, if any person having hearkened to it, carries out what he is instructed therein, he may be expected not to decline, but to prosper."

We may go even further, and maintain that the Suttanta does not profess to be a code meant only for the householders, but for the recluses as well. It lays down various duties of a person who is placed in different relations and stations of life—as a parent, as a child, as a husband, as a wife, as a teacher, as a pupil, as a kinsman, as a master, as a servant, as a householder, or as a recluse.

Remembering that the passages were recommended by the king for the constant study of all—monks, nuns, as well as the laity—it may be judged how accordant was the Suttanta with this recommendation.

Furthermore, there is another important point to consider. As regards the main subject of the Suttanta, it proceeds to give an idea of what the modes of adoring the six cardinal points of duty according to "Ariyassa Vinaya" are. The term "Ariyassa Vinaya" may be reduced to "Ariya-vinaya", meaning "Ideal discipline". No wonder need be felt if the word "Ariya" was replaced by "samukkaṃsa".

Other passages that may be brought to bear upon the "Ariya-vinaya" are :—Majjhima-nikāya, i, 360 ; iii, 293,

299 ; Samyuttamkāya, ii, 205, 271 ; iv, 95, 157-8, 189 ; Anguttara, iii, 58-2, 6 ; 59 ; 103 ; etc., etc.

2. *Upatisa-pasina*.—The questions of Upatissa, who is generally known as Sāriputta, Captain of the Faith. Professor Rhys Davids thinks that it was quite possibly the name that was assigned to a dialogue between Sāriputta and the Buddha, as incorporated into the Mahāparinibbāṇa¹ and other suttas. I find it rather difficult to accept this suggestion. The reason is, that in the said dialogue, the questions were put to Sāriputta by the Buddha, and not to the latter by the former. Whereas, the very name Upatisa-pasina implies that the questions were put by Sāriputta. Failing this, we must look for some other passages in the canon. And the passage which may be brought forward is the Sāriputta-sutta of the Suttanipāta.

This Sutta contains the gist of the dialogue referred to above, besides other important matters (see Suttanipāta, S.B.E., vol. x, pp. 180-3). What is more important, the questions in this sutta are all put into the mouth of Sāriputta. The fact that he came to ask questions is evident from stanza 3—"pañhena āgamaṃ."²

B. M. BARUA.

HISTORY OF THE DOME IN PERSIA

In the valuable paper on the history of the dome in Persia which appeared in the Journal for July, 1914, Mr. K. A. C. Creswell says that the practice of gilding the domes of sacred shrines in Persia "certainly goes back to 1674, when the dome of the shrine at Meshed was covered with gilt copper plates by Shāh Sulciman"; and adds that the previous dome was probably covered with blue tiles.

¹ Dialogues of the Buddha, pt. ii, pp. 87-9.

² The Sutta-nipāta, iv, No. 16, p. 178.

The gilding of this dome can be traced farther back than to the time of Shah Suleiman. The Portuguese monk de Govea, who visited Meshed in 1602, speaks of the gilt dome as shining like fire in the sun, when he saw it. The gold covering may have been given by Shah Abbas, who paid great reverence to the shrine of Imam Reza; but de Govea, who mentions that Abbas gave some golden doors for the shrine, says nothing of the provenance of the gilt dome.

I append his description of the dome, taken from a French translation of his work, published in Rouen in 1646 :—

“On void ceste Chapelle de fort loing ayant vne voulte tres esleuée laquelle est couuerte de grandes thuilles ou plaques à crochet de bronze dorées par dehors comme celles des Indes, de sort que les rayons du Soleil ou de la Lune donnans dessus, il semble que ce soit feu, comme ie me l'imaginay lors que ie l'apperceu de plus d'une lieuë de la ville estant sur vne colline assez esleuée, d'où on la descouvre toute.” (De Govea, *Relation des grandes et victoires obtenues par le Roy de Perse Cha Abbas*, Rouen, 1646, pp. 95-6.)

CLARA C. EDWARDS.

NOTICES OF BOOKS

A HISTORY OF PERSIA. By Lient.-Col. P. M. SYKES.
2 vols. Vol. I, pp. xxv, 544; Vol. II, pp. xxii, 565.
London: Macmillan & Co., 1915.

A comprehensive History of Persia in English, based on the best authorities and utilizing all the sources of information which the critical and archæological research of the past century has made available, has long been needed by all students of Oriental matters. The only history worthy of the name hitherto has been that of Malcolm, of which the first edition appeared exactly a hundred years ago. That excellent work no longer meets the requirements of the case, and on the centenary of its appearance we can welcome Sir Percy Sykes's history without in any way reflecting on the value of its predecessor.

Sir Percy Sykes has interpreted his duty as historian of Persia in the broadest and most comprehensive spirit, and it is possible that some readers may think that too much space has been allotted to the surrounding lands and dynasties with which the destiny of Persia has been involved. Yet a little reflexion will show that the nature of the subject makes this course inevitable if a true insight into the forces which have moulded ancient and modern Persia is to be attained. The problem is no simple one, but complex in the extreme. Persian history is not one but several very distinct histories, and the boundaries of the region to be dealt with are sometimes of enormous extent, from the Indus on the east to Greece on the west, or from Sogdiana on the north to Egypt and Arabia on the south, and sometimes contracted within the comparatively narrow bounds of Persia proper.

Thus we have first the germs of a Persian state in Elam, and its relations with Babylonia and Assyria, then the growth of a more distinctly Persian power in Media and the first beginnings of Persia properly so called. This is followed by the rise and fall of the mighty Achæmenian Empire, its conquest by Alexander, the rule of his successors, and the gradual revival of national rule in Parthia, followed by the resuscitation of a truly Persian state under the Sassanians, which offers a striking parallel to the supersession of Media by the Achæmenians. In the later as in the earlier Persian state we trace the action of the powerful outside influences against which an independent Persia has always had to struggle—influences from the north, the home of the Central Asian nomads; from the west, whence proceeds the ever present and persistent pressure of Europe; or from the south, the tremendous outburst of Arab energy inspired by the new creed of Islām, before which the national state collapsed. And further, during the succeeding centuries up to the present day we can perceive how captive Persia has captured her conquerors not once but again and again. Arab, Seljūk, Mongol, and Turk have all conquered Persia and have all become Persian. They have been captured by a civilization, a literature, and an art superior to their own, and the latest great dynasty which can be called national, that of the Šāfavis, was so rather by religion and adoption than by race, and although supported at first mainly by Turkish tribes was soon enthusiastically followed by the Persian population. The present royal family of Persia is also, it must be remembered, representative of one of these Turkish tribes, the Kājār. The question of religion, too, is of importance, for in modern Persia, as in some countries of Europe, religion rather than race has become the building national force, and a Shī'a is a Persian, whereas a Sunni is a Turk or an Afghān.

This long and varied panorama Sir Percy Sykes has dealt with fully and faithfully, with an abundance of illustration drawn from his own unrivalled experience of the country of Persia and of its people, their customs, their art, and their archæology.

In the introductory chapters he gives a full account of the geography of the plateau and of the low-lying lands which surround it, bordering some on the Persian Gulf, others on the Euphrates, the Caspian, the Oxus, and the Indus, the true limits of ancient Iran.

The country of Elam, extending from the Zagros Mountains to the head of the Persian Gulf, which in early days extended much further north than at present, is then dealt with. Its inhabitants seem to have been partly Sumerian and partly Negrito aborigines, an element still represented in the modern population near the sea. The great age of Persia, comprising the rise and fall of the Median and Achæmenian kingdoms and their dealings with Assyria and Greece, is the subject of chapters xv to xix, and the history of the rise of Macedonia and the conquests of Alexander is set forth in an excellent summary in chapters xx to xxiv. The rule of the Seleucids leads up to the development of the Bactrian and Parthian monarchies (xxvii to xxxiv), followed by the rise and history of the Sassanians, ending with their downfall and the conquest of Persia by the Arabs (xxxv to xliii). The history of ancient Persia comes to a dramatic conclusion with this event, culminating in the battle of Nāhāvand in A.D. 642.

The second volume begins with the history of Persia under the Khalifas, and the narrative of the rule of the Abbāsids, who fixed their capital at Baghdād, close to the old Sassanian capital of Ctesiphon, shows the growth of Persian influence and the extent to which the system of administration and finance was, like their coinage, borrowed by the Arabs from their Sassanian

predecessors. Nevertheless, the identity of Persia as a nation was lost for centuries, and the steps by which it gradually emerged are clearly shown in the account here given of the first three hundred years of the Khalifat. Scarcely had the Persian revival begun under the Šaffārī and Samānī rulers than the rise of Turkish power, first under Maḥmūd of Ghaznī and then under the Seljūks, again brought Iranian lands under a foreign yoke. Yet it was under the Seljūks that Persia began to prosper anew, and the Mongol deluge, which swept away all competitors for power, in its turn gave birth to a dynasty pervaded by Persian culture. A similar revival after the conquests of Timūr took place under the later Timūrids. Since that epoch Persia has not been the subject of any sweeping foreign conquest. The dynasties which have held sway, although not for the main part truly Persian, have yet (with the exception of the Afghans who established an ephemeral rule in the eighteenth century) originated within Persian limits. The whole of this period has been dealt with in illuminating fashion by Sir Percy Sykes. The information extracted from the original Arab and Persian chronicles by many English and Continental scholars is here brought together in a clear and readable narrative, and it may be safely asserted that much of it is now for the first time made available to the English reader, even if such excellent works as Muir's *Caliphate* and Le Strange's *Lands of the Eastern Caliphate* are consulted. The later history of Persia under the Šafavis, followed by the tumultuous episodes of the eighteenth century, which resulted eventually in the emergence of the Kājār dynasty, has been fully treated, and the history of the last hundred years is a work for which Sir P. Sykes's knowledge of modern Persia has specially qualified him. The intercourse of Persia with England and Russia, the variations of the Perso-Afghan frontier, the Persian Gulf, the trade of the

Kârûn, the Indo-European telegraph, the Revolution and its effects are a few of the topics here treated. On these subjects numerous works have been written from time to time, many of which are of great interest, though sometimes warped by personalities and prejudice, but they have not hitherto formed the subject of a clear and continuous narrative like that found in this history, which is written with admirable impartiality and informed by real knowledge. There are also certain episodes in Persian history which may be compared to backwaters in its main current. Such, among others, are the visits of European travellers, the adventurous career of the Portuguese in the Persian Gulf, and the dealings of the Darrâni rulers of Afghânistân, whether Sadozai or Bârakzai, with their Persian neighbours in Khorasan and Sistân. On these and similar topics Sir Percy Sykes may be accepted as an authority. The chapters on literature, which, as Sir P. Sykes points out, owe much to the exhaustive work of Professor E. G. Browne, are full and satisfactory. The account given of the history and development of Persian art is excellent, and its value is enhanced by many fine illustrations, several of which are from original Persian paintings in the author's collections. The illustrations of buildings and scenery throughout are of a high class, many of the views being from unpublished photographs taken by the author himself and by other travellers, as well as those reproduced from the works of Flandin and Coste and others of an earlier generation. Attention must also be drawn to the excellent maps, which illustrate not only the physical features of the country but its history and ethnology, special attention being given to the location of races and tribes in ancient and modern times, a very important point in a country where the ethnic elements are so varied and scattered.

Sir Percy Sykes must be congratulated on the appearance of this important and valuable work, which has cost him

many years labour. He has now moved from Persia to a no less important sphere of action in Central Asia, where we may confidently expect his work will be as valuable to his country as that which his long residence in Persia has enabled him to carry out in that country, work of which the present history is an outward and visible sign.

M. LONGWORTH DAMES.

PARADIGMA AND EXERCISES IN SYRIAC GRAMMAR. By THEODORE H. ROBINSON, M.A., B.D. pp. viii and 148. Oxford: at the Clarendon Press, 1915.

Although the modest title does not reveal the fact, this book is almost a complete grammar, with an arrangement differing entirely from the ordinary textbooks. The advantages of this arrangement are obvious, but it necessitated the omission of a systematic analysis of the chapter of phonology. Written mainly for students in India, the book confines itself to the Western (Jacobite) dialect, and even omits the Estrangeta and Nestorian forms of the letters in the table of the alphabet. In accordance with this practice the author transliterates *p'lāhā* always by *o*, not without causing some slight confusion for the beginner, as this vowel is not distinguished from the long *ō* with an inherent *u*-sound as in ܐܘܪܝܢܐ. The author gets out of the difficulty by arguing that his account of the Syriac vowels "is not scientific", and that the system of dots "used by the eastern Syrians is nearer a true representation of the original vocalization". The system of this vocalization is fortunately inserted, but it still requires some additional notes on the part of the teacher in order to make every point quite clear to the student. This also applies to the rules placed at the heads of many paragraphs. Most of them are somewhat mechanical, and do not give the learner a real insight

into the working of the Syriac language. The author states that the book is an introduction only. It is not, however, an introduction into the broad extent of the language, but rigorously confined to one dialect. There is, then, some danger that more advanced students who consult the larger works of Duval and Noeldeke may find themselves in conflict with new phenomena. As even elementary Syriac is a subject of academic teaching, an intelligent student will be attracted less by mere learning by heart than by watching the effects of characteristics and developments. It must be recognized that the author has aided the student in this respect more than the title of his book promises, and has even inserted, wherever necessary, simple rules of syntax.

The exercises, which are the result of years of teaching, are ample and well thought out, and cannot fail to furnish the student with a good vocabulary. The English exercises can even be recommended to advanced students, especially as no similar compilation exists.

The author writes ܠܠܠ for ܠܠܠ, but the former is not well authenticated, and distinctly repudiated in the dictionaries. The plural ܠܠܠ is not tenable and should be ܠܠܠ. Only nouns of doubly weak stems like ܠܠܠ allow a plural ܠܠܠ in the Western dialect, whilst the Orientals have ܠܠܠ (see Duval, p. 261). Mere misprints are ܠܠܠ (p. 22) and ܠܠܠ (p. 51) for ܠܠܠ and ܠܠܠ.

The system of the book is eminently practical. The author shows a fine mastery of the intricacies of Syriac grammar which is not astonishing in a pupil of Dr. Rendel Harris. The fact that this scholar has written a preface is alone sufficient to secure the book a favourable reception. It will prove very helpful to students preparing for an examination. Its get-up is of the usual excellence of the Clarendon Press.

H. HIRSCHFELD.

SOME RECENT ARABIC PUBLICATIONS

Although the promised series called *Renaissance des lettres arabes* for some reason or other hangs fire, the Khedivial or, as it should now be called, Sultanic Library of Cairo has issued two beautifully printed works. Of one of these, the *Ṣubḥ al-A'ṣā* of Qalqashandī, a single volume was produced in 1903; the five volumes which have now appeared form a separate edition, not a continuation of the former. The substance of the book, which is a kind of encyclopædia for the use of state secretaries, was, so far as it concerns the administration of Egypt under the Mamlukes, made known by Wüstenfeld in 1879 in his *Geographie und Verwaltung von Aegypten*. The original contains much that is of interest in addition to this, and the authorities of the Sultanic Library have done well to publish the whole.

It is not easy to say the same about the other work which is issued simultaneously, the *Tirāṣ* of Yahya b. Ḥamzah, 699-749 A.H., who appears to have been Imam of Ṣan'a. It is a treatise on Rhetoric, occupying three considerable volumes. The matter throughout appears to be exceedingly commonplace, and very little, it would seem, is to be learned from it.

To one of the staff of the *Muayyad*, Muḥibb al-dīn al-Khatīb, we owe a new edition of a rhetorical classic, the *Kitāb al-Bayān wal-Tabyīn* of Jāḥiẓ. Though the text does not appear to differ from that of the edition published twenty years ago (1313 A.H.), it is vastly more readable; the editor has broken it up into paragraphs, vocalized the verses, glossed the difficult words, and assisted the student in a variety of other ways. An index of proper names would have been exceedingly useful, but the number mentioned is so great that this would undoubtedly have added very considerably to the bulk of the work. The editor has earned the gratitude of Arabic scholars by what he has done.

According to Yāqūt (*Dictionary of Learned Men*, vi, 76) there were two editions of this book, the second being the better of the two. Probably the second is the printed text. The same biographer quotes a statement of Jāhīz that the book was presented to Ibn Abī Du'ād, a famous Qāḍī, who died 240 A.H.; the dedication fee was 5,000 dinars. Since it found admirers in Spain in the author's lifetime, its fame must have spread all over the Moslem world. It professes to record speeches and sermons by many famous men; unfortunately their authenticity is ordinarily doubtful.

The *Tauq al-Hamāmah* of Ibn Hazm, edited from the Leyden MS. by K. Petrof (Leyden, 1914), presents us with a new side of Ibn Hazm's literary activity. He is best known as a controversialist, and an exceedingly bitter one; the work edited by Professor Petrof deals with the subject of Love. It contains many anecdotes throwing light on the condition of Islamic Spain in the fifth century of the Hijrah. Many of them are illustrated by original verse. The editing is careful, but the number of misprints does not fall below the average.

A much more elaborate work, also emanating from Russia, is the edition of the *Diwān* of Abu'l-Faraj al-Wa'wa' of Damascus by I. Y. Kratchkowsky, of which the Arabic title-page bears the imprint Petersburg but the Russian the imprint Petrograd. This difference will provide future commentators with an occasion for an historical note. To the text are prefixed 202 pages of Russian introduction, the Arabic text occupies 142 pages and the Russian translation and notes 150 more. The editor has besides provided a whole series of elaborate indices. This would seem, then, to be by far the most elaborate edition of any Arabic poet that we possess, and it reminds one of Scaliger's saying about Casaubon's Persius, that the sauce was better than the fish. For this Abu'l-Faraj is clearly a poet of very second-rate ability. He was a contemporary of Mutanabbi,

and like him an encomiast of Saif al-Daulah, to whom some of the comparatively few longer poems are addressed, but his verses have neither the historical interest nor the ingenuity nor the fire of Mutanabbi's. The greater number of the poems are epigrams of from two to five lines, and their content is usually commonplace. The editor's introduction treats of the Court of Saif al-Daulah, the biography of the poet, the history of Arabic poetry, the style and language of this *Diwān*, and the MS. tradition. His learning and accuracy are worthy of high praise; but how many Arabic scholars in Europe are sufficiently familiar with Russian to profit by them?

D. S. M.

ASIATIC SOCIETY MONOGRAPHS. XVI. THE BABYLONIAN TABLETS OF THE BERENS COLLECTION. By THEOPHILUS G. PINCHES. London: Royal Asiatic Society, 1915.

The last publication of Dr. Pinches is up to the level of what we expect from him, and no praise can be higher. His copies and translations of the Babylonian tablets contained in it are marked by his usual painstaking exactitude, and he has struggled valiantly with the numerous strange words, both Sumerian and Semitic, which they offer. Out of the abundance of his notebooks he has thrown new light on the pronunciation and meaning of many Sumerian ideographs and words.

Mr. Berens had the good fortune to obtain in Cairo a valuable collection of early Babylonian tablets, and the further good fortune of securing the services of Dr. Pinches for their decipherment. In his Preface Dr. Pinches modestly disclaims any great importance for the texts he has published; but, as a matter of fact, all the tablets are of value from one point of view or another, and some of them are exceptionally interesting. Among the latter is the early list of furniture (No. 89), which shows that

the house of a Babylonian gentleman in the Sumerian epoch was as well furnished as the house of a Chinaman to-day. Unlike what we find in the modern Mohammedan world it possessed plenty of chairs and tables, and some of the chairs are specially designated as "high" (US, Semitic *ēlu*), which Dr. Pinches translates "backed". I know not why, though he is certainly right in identifying the object with the *kuššu nemīdu* or "standing-up chair" of the Assyrians.

Other exceptionally interesting documents are the address-tablets in the form of bullæ, which occupied the place of our stamps as well as of the address. They correspond with the addresses on the slips of bamboo which contain the dispatches sent by the Chinese Government in the time of the Han dynasty (B.C. 200-1) to its officers on the Great Wall, where they have been discovered by Sir Aurel Stein. The Sumerian tablets are similarly addressed to "the commander of the fortress" by a "secretary" in the name of the King. The royal name naturally franked the dispatch. The dispatch itself was enclosed in a bag, called *asiku* in Semitic Babylonian, like the tablets which were the equivalents of our cheques as well as those which were ordinary letters. One of the Berens tablets (No. 72) refers to the provision of "tablet-cloth", and in the case of another Dr. Pinches notes the impression left by the cloth upon the clay.

Equally interesting are the tablets (Nos. 33. and 47) which begin with the words, as M. Thureau-Dangin first showed, "basket of tablets." They must have been attached to the basket in which a series of documents relating to a particular matter of business was kept. One of these in my own collection, which is unpublished, is as follows: "Basket of tablets of Sab-bi-šu-bi (and) Sab-tsi it is: year when Gīnīl (or Su)-Sin the king of Ur constructed the sublime bark for Ellil and Nin-lil," that is to say, the eighth year of the king's reign.

Dr. Pinches has increased the value of his book by the very full indices attached to it. He has also added two or three pages of notes with suggestions of improved or additional renderings. To these latter I would add the following: *Tsidinnu* (p. 9) can hardly be the same as *šatinnu*, the Targumic and Arabic *šadnu*, "veil of fine linen," *σινδών* in Greek, since the initial sibilant is different. *Na-ga-ip* (p. 13) I should read as a Semitic word *naqqatum*, "puncturer." Lugal in No. 87, *Obv.* 10, must be the name of "the herdsman". On p. 116 instead of "water-magian" I should suggest "claim to fish from the tank", and on p. 118, "right of fishing in the tank" instead of the proper name "Aabbaha". On p. 123 Dr. Pinches translates, with a query: "let him take its rent, let it not be forgotten." I think the signification is rather: "let him receive (*literu* from *eteru*) the mortgage upon it, if it is not paid." *Iziš*, by the way, in the same deed is the **𒍪** of Gen. xxiii, 17.

Dr. Pinches follows Professor Delitzsch in reading the name Yapium-ilu as Yawaum-ilu and identifying it with the Hebrew Joel. But there are serious difficulties in the way. On the one side, as I was the first to point out many years ago (in the *Expository Times*, 1898, p. 522), the early Babylonian, or rather Amorite, name, which is the equivalent of Joel, is Yaum-ilu. On the other side, Yapium cannot be dissociated from names like Yapi-ilu, in which *yapi* must certainly be a verb, while in the dates of the tablets from El-Hymar, the ancient Kis, Yapium seems to be the name of a king rather than of a deity. It would represent the common abbreviated form of a name compounded with a verb and the name of a god.

The numeration of some of the slips appears to have been altered when they were made up into pages, and the references in the indices have consequently, in some instances, gone wrong; e.g. on p. 152 "p. 30" should be 20; on p. 157 (Naramu) "p. 72" should be 82. There

are, however, remarkably few misprints; I have noticed only "statutes" for "statues" (p. 120), and *hu* for *ha* (p. 153). The little book is a credit to British Assyriology.

A. H. SAYCE.

PARTHIAN STATIONS. By ISIDORE OF CHARAX. An account of the overland trade route between the Levant and India in the first century B.C. The Greek text, with a translation and commentary by W. H. SCHOFF, A.M. Philadelphia: published by the Commercial Museum, 1914.

Isidore, a native of Charax, the Greco-Nabatæan trading town at the junction of the Eulæus and the Pasitigris (Karun and Shatu-l-Arab) near the head of the Persian Gulf, was one of the two or three Greek authors of repute, subjects of the Parthian Empire, who flourished immediately before or after the commencement of the Christian era. One of these, Apollodorus of Artemita, a Greek town in Sittacene, is repeatedly quoted by Strabo; while Pliny is the first to quote our Isidore. Pliny¹ also mentions a certain Dionysius of Charax, a countryman of Isidore's, who was selected by Augustus to supply topographical information for the projected invasion of Armenia by the Emperor's grandson Caius in 1 B.C. Bernhardt suggested that Isidore and Dionysius were the same, but Bunbury is doubtful, and I think rightly so.

Isidore seems to have been a somewhat voluminous writer. Pliny repeatedly quotes him as an authority on scientific geography. Athenæus mentions a work of his, *Παρθίας περιηγητικός*, a descriptive and geographical survey of the Parthian Empire, and gives from it an account of the Bahrein pearl fishery, and a not very intelligible, and certainly more or less fabulous, account of the natural

¹ Pliny, H.N. vi, 31.

growth of the pearl. Lucian also seems to have taken from this work some of his details regarding the Philhellenic kings of Charcene.

Besides these references in Pliny, Lucian, and Athenæus we have an opusculè bearing Isidore's name, the *Σταθμοὶ Παρθικοί*. The Romans translated *σταθμοί* by *mansiones*, a word nearly equivalent to the Arabic *manzil*, and signifying both the halting-place and the day's march of the caravan. Along the main routes there were serais, which were frequently fortified. The Achæmenids had erected such serais along the "royal road" which went by the left bank of the Tigris from Susa to Sardis. Herodotus (v, 52) mentions them, and Amyntas described them in a work now lost. The Parthians also had fortified serais on certain routes, and remains of the fortified serais maintained by the Romans between Coptos and Myos Hormos and Berenice may still be seen.

Isidore's *σταθμοί* is in some ways disappointing, but it enables us to check other authorities, and it contains some information which none but a Parthian subject would be likely to give. It is a brief itinerary of the caravan route from Antioch to Seleucia on the Tigris, and from Seleucia to the borders of India. It consists of little more than a list of places with their distances, and an occasional explanatory note. The work is either a compilation, or a table, extracted from Isidore's "Survey". Although the distance is given from Antioch the itinerary confines itself strictly to the country under the immediate government of the Arsacids. It is divided into two unequal parts. The first part gives the route from Zeugma on the Euphrates to Seleucia on the Tigris. This Zeugma (for there were several) is the modern Bir or Bireh-jik, the nearest point on the Euphrates to Antioch. The caravans crossed the river here by a boat-bridge¹ or a ferry, and it is still the

¹ Pliny, H.N. v, 31 (86), says that Seleucus (Nicator) joined the two banks by a bridge, which must have been a boat-bridge.

main crossing "on the great line from Aleppo to Urfah and Diyar Bekr".¹ From Zeugma the road led almost due east to Carrhæ, or Haran, the home of Abraham, a town of great antiquity, and the rival of Edessa, where, in the third and fourth centuries A.D., there was held a great annual fair for merchandise from the Far East, not unlike the modern fair of Nishni Novgorod. From Carrhæ the route turned due south, following the River Balikh to its junction with the Euphrates near Nicephorium. All this region abounded in Greeks and Greek towns and foundations; but south of Nicephorium the country was more or less desert, and Greeks were few. From Nicephorium Isidore's route followed the left bank of the Euphrates (the right bank was nominally Roman), until you reached the borders of Babylonia. It then left the Euphrates and followed the Nahr Malika,² the famous canal, to Seleucia. Isidore's itinerary describes all this route in great detail. It is the route which the armies of Trajan, of Septimius Severus, and of Julian followed; and

¹ Chesney, *Expedition*, etc., vol. i, p. 47. Bir is 140 miles by road from the nearest Mediterranean port, and 133 miles in a direct line from the mouth of the Orontes. Isidore's itinerary gives the distance from Antioch to Zeugma as 49 *schœnoi*. The *schœnos* was nominally equal to 30 stadia, or a little over 6,000 yards, say 3½ miles. This makes the road from Antioch to Zeugma 134 miles, which is perhaps a little over the mark. The *schœnos*, however, was, like all Oriental measures of length, a variable quantity. From Zeugma to Seleucia is given as 171 *schœnoi*, equal to 538 miles. The number of days' marches is not given. Herodotus uses *parasangs* and not *schœnoi*. *Schœnos* was an Egyptian measure, and the merchants of Charax must have introduced it from Egypt. In Northern India the *rasi* or "rope" is still recognized locally as a measure of length.

² It or perhaps another canal was often regarded as an arm of the Euphrates. Isidore is, I think, the first writer to call it by its native name Νάμαχος, Nahr Malika. But Isidore was clearly as much at home in Aramaic as in Greek. Mr. Schoff has omitted any notice of this canal, but it was a very important point in the passage to Seleucia. The camels seem to have unloaded when they came to the canal, and the goods went forward on boats. This was evidently the case with the traffic across the desert to Scenæ; probably also the case with the Euphrates traffic.

since Chesney's time (1837) many travellers have described it. It is one of the best-known routes both in antiquity and in modern times. Isidore's account adds little to our knowledge, and is suggestive rather for its omissions than for what it contains.

For there were in Isidore's time two other routes to Antioch of equal importance. One of these led from the ports at the head of the Persian Gulf, by way of the right Euphrates bank to Palmyra, which had been visited by Marc Antony, and was fast becoming an emporium of importance. This road ran through the territory of Arab phylarchs, who professed usually to be on the side of the Romans, and Isidore was not concerned with it. The other alternative route went direct from Zeugma across the Mesopotamian desert to Scenæ, a considerable town on the Nahr Malika, avoiding the Euphrates altogether. It took twenty-five days, and Strabo says that merchants preferred it, because of the arbitrary exactions levied on them by the Arab sheikhs who possessed the Euphrates valley. The desert caravans, on the other hand, were conducted by the Scenitæ Arabs, whose charges were moderate and fixed. They supplied the camels, and kept the wells and cisterns (*hydreumata*) in repair.¹ Thus, although the Euphrates route was pleasanter, its inconveniences were great. Isidore may have omitted the desert route because it was practically independent of the government.

The second part of Isidore's work deals with the journey from Seleucia to the limits of the Parthian Empire in Arachosia. The road traversed eighteen provinces, and its length was estimated at 687 *schornoi* (c. 2,160 miles). But despite its length Isidore treats it in a very summary fashion. The places named are few, the distances between the camping-grounds are frequently omitted, and after Parthyena the totals for the provinces

¹ Strabo, xvi, p. 748.

alone are given. Between Zeugma and Seleucia Isidore had frequently mentioned places only three or four miles apart. Beyond Seleucia the marches vary from 3 parasangs (say 16 or 17 miles) to double that number; and the last march to Margiana is put down at 30 parasangs, or nearly 100 miles at a stretch.¹

The route in question is the one prescribed by physical conditions. The Achæmenids must have used it; Alexander followed it, his surveyors measured it, and the modern caravan route seldom diverges from it, and then by a few miles only. It led from Seleucia on the Tigris through the fertile province of Apolloniatis (or Sittacene) to Chala (Helwan), then climbed by the rocky staircases (κλίμακες) of the Zagros range to the high uplands of Media; passed Ecbatana, Rhagæ, and Hekatompylos, not far from the modern Teheran, then through the famed Caspian Gates and a long and narrow defile of the Paropamisus to Hyrcania, and followed the northern spurs of the Paropamisus to Margiana (Merv). A good deal of the country east of this was still Parthian, but the emporia for the Chinese trade lay outside it. Isidore's route, therefore, turns south through the rolling country of the Hari Rud to Aria, Drangiana, and Arachosia. It ended with a town not far from the modern Kandahâr,² Alexandropolis, on the Arachotus, a tributary of the Helmund. Alexandropolis was the metropolis of Arachosia, and a πόλις ἑλληνικὴ. Here, says Isidore, the Parthian Empire ended.

Despite the meagreness of his notices, this part of

¹ Two and a half English miles an hour is a very fair rate for a camel caravan. Sir W. Ramsay says that in Asia Minor travellers on foot usually did 16 or 17 miles a day; those in chariots about 25 miles.

² Bunbury (*History of Ancient Geography*, ii, p. 164, n. 2) says that this Alexandropolis was "undoubtedly" Kandahâr, and so say all the other commentators. But Dames (*Encyclopædia of Islam*, s.v. Afghanistan, p. 149) says that Kandahâr is historically a modern town, first mentioned in the fourteenth century A.D. Alexandropolis must have been somewhere in this neighbourhood.

Isidore's work is the most interesting. We learn a good deal which we should not have otherwise known.

1. We see that Alexandropolis on the Arachotus was a πόλις ἑλληνικὴ, that is, a town with a Greek municipal constitution, and city magistrates (archons, perhaps, but more likely as at Seleucia they may have borne other designations), a *boulē*, probably a *grammateus*, and other officials. This Alexandropolis is the only πόλις ἑλληνικὴ mentioned by Isidore after Chala (Helwan), but towns with Greek names are not uncommon, e.g. Demetrias polis in Arachosia. West of the Zagros range in Babylonia and Sittacene there were a fair number of Greek cities which possessed self-government, and in the west of Media Greek was the common language of business even among natives down to the time of Isidore.

2. He mentions various treasure-cities of the Parthians, and also a custom-house (τελώνιον) in Media Superior. We see, moreover, what an important part famous shrines and sacred localities played in the economy of Asiatic life. Isidore mentions a number of places where fire altars were always going, one among many proofs of the spread of fire-worship under Parthian rule. And I note that he always distinguishes between Artemis, Atargatis, and Anahit. We are apt to confound the three; their worshippers never did.

3. He tells us that the Parthians called Arachosia White India—ταύτην δὲ οἱ Πάρθοι Ἰνδικὴν λευκὴν καλοῦσιν. The Indians here were not natives but immigrants. The conquests of Darius, and later of the Greco-Bactrians, must have induced numerous Indians, Brahmans and merchants, to settle here; just as somewhat later the Kushan kingdom attracted them to Bactria.

4. He gives us important information regarding the Sacas. Between Drangiana and Arachosia came Sacastane or Sacastene—Σακαστηνὴ Σάκων Σκυθῶν, ἣ καὶ Παρατακηνή. Sakastene had four towns—Barda, Min, Palakenti, and

Sigal. At Sigal was the residence (*Βασιλεια*) of the Saka king. The Chinese tell us that the Saka king fled south after his defeat by the Yue-chi (c. 160-150 B.C.). We find him established here 150 years later. But, although a king in his own right and ruler of his people, he is not a semi-independent *regulus*, but a subject of the Arsacids. Of the *reguli* who submitted to a Parthian protectorate there were, I think, at one time or another, something like eighteen. The Saka is not one of these, and the fact explains how Parthian princes, like Gondophares, ruled over the Saka occupation of the Indus Valley.

Isidore's work is included in all the collections of the minor Greek geographers, the latest and best being that of C. Müller (Didot, Paris, 1853). These volumes are large and unwieldy, and seldom to be found in a private library. The only handy edition of Isidore which I know is by E. Miller (Paris, 1839), an excellent edition with French notes; but its geography is antiquated, and it must be rare, as Mr. Schoff does not mention it. Mr. Schoff has therefore rendered Oriental scholars a service by reprinting Müller's text with an English translation in pamphlet form, and bringing Müller's geographical notices up to date. He has added two maps, a historical introduction, and extracts from the works of Lord Curzon and Major Sykes, together with passages from Hirth's *China and the Roman Orient*, a proof of his diligence and zeal. The translation is extremely literal, not to say bald, which is curious, since it was one of the merits of Mr. Schoff's translation of the *Periplus* that it was readable. I would suggest that where he undertakes to amend the text in his translation he should give the original as it stands, and put the emendation in brackets. Thus, on p. 7, where the original text reads "Baptana", the translation gives "Bagistana", and a scholar ignorant of Greek would have to consult p. 28 before he found out that Bagistana was an emendation. On p. 5 (l. 8) Mr. Schoff translates *είνα*

Βασιλεία Ἀρτέμιδος ἱερὸν, etc., "then a royal place (query, palace?), a temple of Artemis," etc. *Basileia* must either be the name of a place, as Müller makes it, or the name must have dropped out, as Müller suggests. A river of Mesopotamia was called *Basileios* according to Strabo (xvi, p. 747). And what exactly is a *κωμόπολις*? It occurs four or five times in the account of Mesopotamia. Mr. Schoff sometimes translates it "a small town", and sometimes "a walled village". The Latin version uniformly translates it by "*vicius muris cinctus*", or some equivalent phrase. Strabo (xvi, p. 743) calls Ctesiphon *κώμη μεγάλη*, and a little later *πόλις ἀντὶ κώμης*. I understand *κωμόπολις* to be a place with a large population, but with the irregularity and rusticity of a village. There are many such in Northern India, large villages of 5,000 or 6,000 souls, confused collections of mud hovels, sheltering an agricultural population. In the time of the Mahratta raids they were walled; now they are not. Another technical term used by Isidore in his account of Mesopotamia is *σταθμὸς βασιλικός*.¹ Herodotus says that along the royal road to Sardis there were *σταθμοὶ βασιλῆϊοι καὶ καταλύσεις κάλλισται*, royal post-houses and excellent camping-grounds. The post-houses were for Government officials and couriers. The Romans kept up such post-houses with relays of horses; apparently the Parthians had them also, but Isidore only mentions two. Isidore's translation of "Phaliga" is interesting, since it proves his knowledge of Syriae. Phaliga was a station on the Euphrates; "in Greek one might say"—what? The MS. reading is *μεθ' ὁπωρινόν*, "autumnal." Miller changes this to *μετοπωρινόν*, which I suppose would mean some kind of marble rock. Müller reads *μεσοπορικόν*, the "half-way" station. Phalig, I am told, means "division" in Syriae; and Steph. Byz. says *φάλγα κώμη μέση Σελευκείας τῆς Πιερίας, καὶ τῆς ἐν Μεσοποταμίᾳ*. Clearly, therefore,

¹ Translated by Mr. Schoff "a royal station".

Phaliga meant the half-way halt, but we should have expected *μεσότηρον*, and *μεσσοτερικόν*, as Müller says, is an unknown word.

J. KENNEDY.

INDIAN THEISM. By NICOL MACNICOL. Oxford, 1915.

This work by Dr. Macnicol is the first of a series under the title of "The Religious Quest in India", edited by Messrs. J. N. Farquhar and H. D. Griswold, in which it is proposed to give an account of the religious life of India which shall be sympathetic and scholarly and shall bring out the relationship between that life and the Christian faith and ideals. The project is clearly justified and timely. The missionary spirit of the present day differs from that of the spirit of older times in many respects, and in one matter at least for the better, in its realization of the importance of a clear understanding of the faiths of those whose adhesion to Christianity it would seek to win. A missionary with this view of his task is therefore especially fitted to grasp the essence of alien beliefs, for spiritual matters are much more easily intelligible to him than to the average man, and his religious consciousness enables him to penetrate to the heart of a faith which to mere ordinary sense seems only fantastic. At the same time, the frank comparison of these beliefs with Christianity is just and proper. It would be easier to expose the defects of other faiths by a contrast with some definite religious philosophy: any Indian faith could be examined both as regards its inner coherence and as regards its ability to explain and rationalize the course of life and the world, and could be unhesitatingly pronounced radically defective in both aspects. It is really far more just to use as the standard of comparison, not an ideal of religion, but another world religion, and to indicate in this way the defects of the beliefs of India.

The theistic element in the philosophy and religious life of India is, it must be confessed, not of the highest merit or importance. Any theism has to strive to realize propositions which can only be reconciled with one another by difficult means: God must be all in all, omnipotent and omniscient; the world and the spirits of men must not be a mere illusion, but must possess true reality; man must not be a mere creature of fate, nor even an obscured fragment of the divinity, but must be accorded that freedom of will, the power to prefer good to evil or evil to good, which alone makes him a personality; God must not be abstracted from the world or be withdrawn from it; the world is an essential thing, and its improvement in every aspect is a worthy and divine aim; the individual soul seeks for communion with the divine, but not for absorption of its individuality; the relation of God and the soul is one of striving on the part of the latter and of help on the part of the former. These requirements afford infinite room for accommodation and refinement, and in the history of Christianity they have been and will be answered in diverse ways, though in the course of the centuries with ever deeper consciousness of the issues involved, and with a fuller realization that no simple solution of so vast a problem is possible, and that no solution which is complete is possible for us.

The thought of India started from a religion which had in Varuṇa a god of decidedly moral character, and the simple worship of that deity with its consciousness of sin and trust in the divine forgiveness is doubtless one of the first roots of Bhakti, a conception the foreign origin of which has now been abandoned generally. The relation of his worshippers to Indra was unquestionably one of faith in the bounty of the god if duly worshipped, and the formal *do ut des* doctrine of the Brāhmaṇas is not an adequate expression of the real religious faith of the *Rgveda* or of the ordinary Indian of the later time. But

theism is in these cases still merely nascent and is not yet conscious of the real problems of its existence. At this juncture, when the religious thought of India became introspective, it assumed, for reasons which we shall never know, a definitely intellectual character, the only result of which could be the abstraction of the divine from the world. The Upaniṣads present a philosophy in which many different elements are present, and the interpretation of Śaṅkara even as reinterpreted by Deussen is clearly often at fault. But there is no doubt that the tendency of the Upaniṣads is to abstract the deity from the world of life, and this tendency is carried to its logical outcome in Śaṅkara's doctrine of the absolute; in another direction it results in the sharp distinction of Puruṣa and Prakṛti of the Sāṅkhya system, the fatal error lying in the fact that it is not realized that truth rests in the comprehension of reality, not in the abstraction from it. The same defect is of course a characteristic of philosophic thought in all its manifestations, and it is even possible to doubt whether the Aristotelian conception of God means a being who thinks without content, like the Brahman who is described as Cit, or a being whose thought comprehends the whole rational universe of thought in all its extent. The inevitable result of this view is of course to deprive the individual of any reality and to render the fate of the enlightened soul absorption in the Brahman,¹ and this view, though it is not the normal one of the Upaniṣads, which in the main contemplate happiness in heaven as the reward of knowledge, is clearly here and there enunciated. More serious still is the fact that the intellectualism of outlook precludes any real ethical teaching; it is indeed assumed that morality is a preliminary to the knowledge desired, but philosophically such an assumption is worthless, as it affords no criterion of morality, and relegates the will to a place of no

¹ This is clearly laid down in BĀU. ii, 4. 13, despite Sukhtankar.

importance in psychology. The whole of Indian philosophy suffers from this fundamental error of ignoring the will; moral precepts abound in Brahminism as in Buddhism and Jainism, but a rational basis of morality is never sought, despite the fact that the Cārvākas, an old and influential school, as we see from its mention with Yoga and Sāṅkhya in the *Kauṣīliya Arthaśāstra*, directly raised the question by their doctrine of psychological hedonism. Hence arises the ascetic tendency of Indian morality, the concentration of the mind on the self, the striving to quell all impulses of will, and the frank admission that the enlightened sage is above all morality. The doctrine of Karman, which even Dr. Macnicol regards as strongly ethical, is so only in a very secondary way: the conception is one rather of logical sequence than of moral value; logically there is no possibility of evading the Karman, and so a man's action is irrevocably determined; illogically enough this can be represented as urging him to good deeds in this life, but the truth is clearly that the good deeds will result from Karman itself, and all attempts in Indian thought to modify this fatalism are illogical and as a result unsuccessful, and this is a consequence directly due to the treatment of the will.

But parallel with the development of the thought of the Upaniṣads were arising the religions of Viṣṇu and Śiva, and in special the former. The *Bhagavadgītā* does show clear traces of theism, but it is impossible not to agree with the author¹ that the theism is blended with other and non-theistic elements, and that there is no proof that the theistic element ever existed as an independent poem. The Avatars of Viṣṇu are often adduced as a parallel to the incarnation, but the Avatars are in the main feeble and meaningless episodes of no substantial theistic value. Nor is there any reason to believe that the theism of the *Gītā* was early popular: the first great

¹ pp. 76 seqq.

theistic movement of India is that of Rāmānuja, and in his system and those that are based in whole or part on it, and in a less degree in the Śaiva sects, are to be found the real theisms of India. But precisely at this point we are met with the fact that Christian religious influences are possible and even probable. But Indian theism is in its highest attempts greatly hampered by its origins, by its close connexion with the doctrines of Karman and transmigration, and by the abstract character of the divinity which prevents any motived relation between God and the world, which He creates but at pleasure and without purpose. Probably the best part of Dr. Macnicol's work is the last, in which the theism of India is contrasted with Christian theism with due care and insight into the complicated problem.

In a work so full of matter and dealing throughout with controversial points there must be much on which doubt can arise as to the correctness of the author's views, and a few of these points may receive brief mention. In common with many others Dr. Macnicol asserts¹ that the fetishism and demonology of the *Atharvaveda* are older than the religion of the *Rgveda*. But this redresses the balance in favour of the former text most unduly. By fetishism here the author must mean the worship of or the treating as divine of "odds and ends" in contrast with the worship of natural powers, vaguely anthropomorphized, as in the *Rgveda*. We cannot say that either fetishism or demonology is older than the worship of e.g. the sun or the sky or the storm-god, for we have no proof that this is the case. Philosophically it is most gravely doubtful if we can lay down an order of appearance in time of these forms of thought; historically we know of no case of a development of the sort assumed. It is true that by a curious lack of logic we are sometimes invited to find such a proof in the alleged religious history

¹ p. 27.

of Australian aboriginal tribes. But apart from the fact that many competent authorities have seen in the beliefs of these tribes traces of a belief in a high god distinct from their other beliefs, there is the obvious objection to this reasoning from the habits of these aborigines that they are not proved to be primitive in the sense of representing true early man: they are, it may be said, primitive in the sense of degraded because they have fallen on unfavourable surroundings and have taken a wrong path in religious as in social organization and economic habits. All that we are justified in holding is that these several beliefs were probably equally primitive and that the *Atharvaveda* does not always carry us in its substance, as opposed to its form, into a period posterior to the *Rgveda*; and even then we must remember that the *Atharvaveda* is a much later work than the *Rgveda* and that it does contain much which may have been borrowed from the aborigines of India, after the period of the *Rgveda*. We need not hold that the Aryan was a man of a religion of purity unsullied, and that everything of magic is non-Aryan, but the parallel of Greek religion is a support for the view that the religion brought by the Aryan invaders was in many respects already aristocratic in tone and had cast aside much of primitive savagery.

Again, in the account¹ of the Avatars of Viṣṇu Dr. Macnicol seems to hold that the boar and tortoise were once actually worshipped, and that these incarnations are thus really animal worship in origin, just as Gaṇeśa was in origin an elephant god. But it is doubtful if the actual worship of animals as such is here proved. Animals may be worshipped as such for many reasons, e.g. for their courage or utility, or for fear of their spirits or the revenge of their kindred, or because the spirit of an ancestor is believed to be in the beast, but there is also

¹ pp. 200, 203.

possible a mere theriomorphism in which the animal is not in itself divine but only in its connexion with the god. The case of the boar and tortoise may be explained on this hypothesis without any difficulty,¹ and in default of decisive evidence we must be content to leave the matter unsettled. In the case of Gaṇeśa the elephant is probably chosen as a symbol of his wisdom, and it is doubtful if any real elephant god can be accepted. The fish incarnation, again, does not present in itself any appearance of a worship of fishes: it seems rather to be a piece of mythology pure and simple (probably enough borrowed from the Semites, as is indicated by its late appearance in Indian literature), which is at first not connected with any deity, and later is appropriated to Brahman and then to Viṣṇu. The man-lion incarnation may well be a mere piece of inventive Vaiṣṇava mythology.

Here and there Dr. Macnicol seems inclined to press points unduly. That the Brāhmaṇas² treat Viṣṇu as identical with the sacrifice and ask him to make good its defects do not show that he was "on his way to his place as the god of the worship of men's hearts", or "was recognized in his aspect of grace as a saviour". The dwarf shape of Viṣṇu does not indicate that "out of weakness issued strength and safety": the shape is adopted for the purpose of deceiving the Asuras, in guile, not in weakness, and the dwarf is symbolic, not of weakness—which is not the aspect of a dwarf—but of cunning and craft.

Of minor points may be mentioned the fact that it is not safe to assume³ that the connexion of Kṛṣṇa with Devaki is as old as the *Chāndogya Upaniṣad* until it is shown that the two Kṛṣṇas are identical. Nor is it true that Nestorian missionaries entered the North of India in

¹ Garbe (*Indien und das Christentum*, p. 205) talks of totem animals, but this begs the whole question. Of the tortoise only is there a trace of possible totemism.

² p. 30.

³ p. 274. See above, pp. 547-50.

639 A.D.¹ This error is borrowed from Garbe² and ultimately from Sir G. Grierson,³ but for giving it wide currency the latter has already made complete amends by his correction of Takakusu, on whom the ultimate responsibility for the mistake rests. In his account of the growth of Kṛṣṇa worship the author seems to have been somewhat too readily persuaded by Sir R. Bhandarkar of the correctness of his views. The separation of Vāsudeva and Kṛṣṇa as two entities it is impossible to justify, and it is equally impossible to bring down the identification of Kṛṣṇa and Viṣṇu to a late epoch, since it is clearly implied in the *Taittirīya Āraṇyaka* (x, 1. 6) and in the *Mahābhāṣya*, and Garbe⁴ accepts my view that the former probably dates from the third century B.C. at latest, and urges that Megasthenes clearly recognized an Avatar of Viṣṇu in the shape of Kṛṣṇa in his account of Herakles in India. The truth of the substance of the legend of St. Thomas' activity in India⁵ should not now be accepted without some answer to Garbe's refutation⁶ of it, which is one of the soundest parts of his work. Nor is there any more satisfactory proof for Sir R. Bhandarkar's theory of the wandering Ābhīras, who brought the legend of the Christ-child to India in the early period after the Christian era, than for Mr. Kennedy's theory of Gujars who introduced the same legend about 500 A.D. from Central Asia, which Garbe has disproved.⁷ But in rejecting this suggestion of Sir R. Bhandarkar in view of the fact⁸ that the child Kṛṣṇa is older than Christianity, Dr. Macnicol is really undermining the theory of a Vāsudeva or Kṛṣṇa who founded a theistic theology. The same error is more obviously made by Garbe himself when he denies that Kṛṣṇa was originally and properly divine, and seeks to reduce him to a mere mortal teacher.

¹ p. 275.² ERE. ii, 548b.³ p. 273.⁷ Op. cit. pp. 224 seqq.² *Indien und das Christentum*, p. 181, n. 4.⁴ Op. cit. pp. 213, 265.⁵ Op. cit. pp. 130 seqq.⁸ Keith, JRAS. 1908, p. 172.

This process accentuates the difficulty of explaining the origin of the Kṛṣṇa legend; those who hold that Kṛṣṇa was certainly divine point out that he appears in an old nature ritual as a rival of Kamsa in the *Mahābhārata*. It is clear that from this original divine character of Kṛṣṇa as the spirit of reviving vegetation we can derive his whole character, both as a child and as a hero, for the vegetation spirit has both sides in the Greek Dionysos, who is in this aspect parallel to Kṛṣṇa, and the legend of Kamsa is a mythological invention based on the ritual of (a) the child-god and (b) the slaying of a rival—the old spirit of vegetation or some similar conception—by the new spirit. It is perfectly true that the worshippers did not understand the origin of the representation of the conflict of Kṛṣṇa and Kamsa,¹ but the same remark applies to the case of the legend of Pentheus embodied in the *Bacchæ* of Euripides, or the modern folk-play of Northern Greece, and yet it is not doubted that these two have their origin in a vegetation magic ritual. The opponents of this view have to explain the two sides of the god, and thus to multiply entities until we have Dr. Macnicol's apparent willingness to accept, not merely (1) a vegetation spirit, the evidence for which he clearly indicates,² but (2) a reformer Kṛṣṇa, (3) a reformer Vāsudeva, and (4) even a Rajput hero. It is perhaps in this view too lightly assumed that Indians of the period seven centuries B.C. were ready to deify men. We cannot argue cogently from the later Indian—even from Buddhism—to the Indian of the seventh century B.C.

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¹ This is apparently the point of Hillebrandt's remark. *Über die Anfänge des indischen Dramas*, p. 19; if so, the answer is as above.

² pp. 37-8.

THE HEART OF JAINISM. By Mrs. SINCLAIR STEVENSON.
Oxford, 1915.

The second of the works on "The Religious Quest of India" deals with the most perplexing of Indian religions, the system of Jainism, that one of the Indian faiths which offers least parallel to the theistic faiths and the spirit of which is admirably expressed in the saying reported by the author of a Jaina, "Why should I love a personal god? I hope to become a god myself." The mere existence of such a faith seems at first sight strange, but Mrs. Stevenson's account, based as it is on a prolonged investigation of Jainism in Kāthiāwād, makes the phenomenon more easily intelligible. Jainism from the outset seems to have avoided the error of Buddhism in making adequate provision for the lay community. The Jaina faith thus provided for a body of ascetics of the usual Indian type, and for their support by communities which were subjected to reasonably modified forms of the obligations incumbent on the monks. These regulations had in some degree evil effects, as the objection to the taking of life has led to the Jaina devotion to money-lending and its consequent evils, but that very fact tended to increase the power of the community. At the same time the lay adherents, and especially the women, have preserved their faith in Hindu beliefs of all kinds and are permeated with Hindu superstitions,¹ in which they find a suitable outlet for emotions which could not be satisfied with the Jaina creed. But beyond this, officially disapproved, tendency to Hinduism, the faith itself is deeply permeated with Hindu influences, and especially with influences of Kṛṣṇa worship. Of this there can be no more striking proof than the taking over of the Kṛṣṇa legend and its reworking in a tedious shape; its importance is seen in the fact that the legend of Mahāvira's birth is

¹ pp. 264 seqq.

entirely derived from that of Kṛṣṇa's birth, a fact which wholly invalidates the theory of Jacobi¹ that the story is an invention produced in order to prove that Mahāvīra was really the son of a Kṣatriya lady and not merely her stepson. The disrespect thus shown to Rābhadatta and Devānandā in not allowing a Tīrthamkara to be born in a Brahmin family is doubtless a deliberate slighting of the Brahmins, and the idea that Devānandā was really a Brahmin wife of Mahāvīra's father is clearly a blunder. But though Brahmins were not the ideals of Jainism the faith never clearly extricated itself from Brahminism. Brahmins continued to act as domestic chaplains, to be employed at birth ceremonies, and often at marriages and at funerals, and Brahmins may even act as paid officials at Jaina temples of the Śvetāmbara sect.² Hence it is natural enough that Brahminism has never been so hostile to Jainism as to Buddhism. Mādhava ranks the Jaina philosophy above the Baudḍha, and many Jainas are content to be regarded as Hindus. Doubtless to some degree Jainism in its origin marked a certain revolt against the Brahminical doctrines, but the revolt was hardly an intellectual one; its main feature lay in the exaggeration out of all proportion of the ideas of Ahimsā on the one hand and renunciation of all superfluities, such as clothes, on the other; its philosophic doctrine, so far as it can be said to have any, is singularly valueless.

The origin of Jainism is traced by Mrs. Stevenson³ to a revolt of the clever, critical Kṣatriyas against Brahmin exclusiveness, which purported to forbid entry on the Sannyāsin stage to any but Brahmins, and which claimed exclusive control of the sacrifice. Whatever the modern Jainas may believe, there is no doubt that the Brahmins made no such claim as regards the Sannyāsin, for the

¹ SBE. xxii, p. xxxi.

² pp. 18, 250. The contrary statement on p. 6 is clearly inaccurately put.

³ p. 3.

Āśramas in their texts, whether Vedic or later as in the *Arthaśāstra*, contemplate all the three upper classes as entitled to pass through them. Nor is it clear that the sixth century was specially a time of suffering for the common people, so as to make the rise of Jainism specially natural: indeed, if the tradition is to be believed Pārśvanātha had already set out the main tenets of Jainism 240 years before. The date cannot be relied upon, but it seems quite probable that there did already exist some earlier Jaina order, and the fact is of some interest, as it lessens the importance which would otherwise attach to the fact of Mahāvira's appearance in the sixth century B.C., a time of much spiritual activity in the world.

A further point adduced¹ in favour of the Kṣatriya origin of the Jaina faith is its connexion with the anti-Brāhmaṇic system of philosophy, the Sāṅkhya, with which it is said to have much in common. But it is not clear that this is the case. In the first place the description of the Sāṅkhya as anti-Brāhmaṇic is surely an error: the Sāṅkhya does not accept the Vedāntic Brahman, but it is a delusion to hold that Brahmanism = Vedāntism. The Sāṅkhya system is in no wise anti-Brāhmaṇic; it displays no trace of Kṣatriya origin or predilection. It can trace its source to the *Kaṭha Upaniṣad* itself, which, read without prepossession, is open to the interpretation that of each man there exists a Puruṣa or self which exhibits itself as above the Avyakta (= Prakṛti), the Mahān Ātmā, the Buddhi, Manas, the senses and their objects.² The Upaniṣad does not explain whether this Puruṣa is only one with which all men are identical, but it naturally does not appear to enunciate any such doctrine, and its fundamental distinction from the Sāṅkhya rests in the fact that it does not treat the Avyakta as being as entity independent of the self. The Sāṅkhya view is, however, a natural enough effort to hold apart the

¹ p. 4, n. 1.

² pp. 89-93.

subject and the object and to emphasize their distinction, and it seems singularly needless to ascribe to the Kṣatriyas the development of this doctrine. Moreover, even if the Sāṅkhya system were closely allied to the Kṣatriyas, it would still have to be shown that there is a close similarity between the Sāṅkhya and the Jaina views. This is hardly the case: the proof at least is not given by the author,¹ though it is promised, and the Sāṅkhya doctrines as to causation, the unaffected character of the soul, the activity of Puruṣa, and so forth are opposed to the Jaina, which in its conception of the activity of the soul is more akin to the Nyāya and Vaiśeṣika views, and which is also akin to the Nyāya in its insistence on logic, to which it made some contributions of more importance than its Saptabhaṅgi Naya. Jainism, however, is on a much lower philosophic plane of thought than the Sāṅkhya, as may be seen by its retention of the concept *jīva*, life, rather than soul, and by its use of *prāṇa*, a term for the vital organs collectively. These two words are an inheritance from the Upaniṣad philosophy, and in the Sāṅkhya no place is found for *jīva*, and the *prāṇas* form only a section of the old *prāṇas* and are definitely made to depend on the Indriyas and Nānas: in both cases the Vedānta clings more closely to the earlier terms; though it makes a special use of them.

The strength of Mrs. Stevenson's work does not, however, lie in the matter of the origin or the development of the doctrine of Jainism. It is distinguished on the one hand by its careful and valuable exposition of the Jaina categories in their subdivisions, and on the other in the painstaking and clear description of Jainism as practised to-day. Both these parts of her work are excellently done: it is true that the Jaina account of existence is deplorably devoid of insight and interest, but as part of Indian philosophy it is right that it should be

¹ p. 6, n. 1.

described, as it is here described, without any effort to find in it hidden meanings or anticipations of modern psychological analysis, but with a determination to ascertain what the terms mean to the Jainas themselves. The account of the monastic life of the Jaina priesthood and of the practical working of Jainism in secular life is of special value in its vividness of detail, derived from close personal knowledge and study, which is in due course to secure the student Nirvāṇa. Mrs. Stevenson found most puzzling¹ the attitude of Jainism to suicide, seeing that ordinary suicide is to them as much a crime as religious suicide a virtue. The discrepancy of opinion, however, seems to be in entire harmony with the Jaina logic which, for example, at one and the same time results in the charming cleanness of the houses of Jaina ladies and in the glorying in filthiness of the ascetic. That logic forbids the slaying of a miserably diseased animal and enjoins the preservation of its life since its next existence may be yet more unhappy than its present one. The ordinary suicide will clearly be hurrying himself to a still more unhappy fate than his present existence. But, on the other hand, the ascetic who dies by voluntary starvation is fulfilling two Jaina tenets: he is carrying to the full perfection the rule of abstinence and he avoids all further possibility of violating the prohibition of injury to other life. Moreover, *ex hypothesi*, he has attained the goal of his present life and there can be no ground for lingering longer superfluous on the stage. The Jainas indeed solve thus the constant problem of the Vedānta: after full enlightenment why does the man longer live? The Vedānta can only ascribe the fact to the rule that the actions of a previous birth which have begun to work out must complete the process, a lame and unphilosophic explanation of a serious difficulty.

¹ p. 206, n. 3.

In her account of the legendary history of Jainism and of the historical deductions to be drawn from it Mrs. Stevenson follows closely the works of Jacobi, Bühler, and Hoernle, with the result that Bhadrabāhu appears as a contemporary of Candragupta, and the famine which is alleged to have caused the great schism is assigned to 310 B.C. But, although the labours of these scholars have clearly established the authenticity of the view that Jainism is a genuine old sect not derived from Buddhism, the confirmation of the rest of the tradition is sadly to seek, and the legends connecting Candragupta with the faith are essentially open to suspicion. Nor is there any reason now to accept the view that Orissa was already penetrated by Jainism in the second century B.C., for the inscription cited by Hoernle is no longer to be assigned to the supposed date.¹ The Jaina tradition was not early made trustworthy by its reduction to a fixed canon, and the onus of proving its value rests on its supporters. The Digambaras constantly contradict the Śvetāmbaras in their assertions, and we can often feel fairly sure that both their accounts rest on nothing more than the creative imagination of the sectaries. When it is realized that the accounts of Buddhism are deeply tainted with inaccuracy, and that one council and a king seem to have been early invented, it is hardly surprising if we cannot accept Jaina dates as possessing a *prima facie* validity.

The transcription in the volume is unhappily not quite the same as in that of Dr. Macnicol, *c* and *l* being transcribed *ċ* and *ĵ*. But though here and there slips occur in the Sanskrit versions of technical terms, they are few, and in this and other respects the work maintains a high level of accuracy.

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¹ p. 85.

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TRANSLITERATION
OF THE
SANSKRIT, ARABIC,
AND ALLIED ALPHABETS.

THE system of Transliteration shown in the Tables given overleaf is almost identical with that approved of by the International ORIENTAL CONGRESS of 1894; and, in a Resolution, dated October, 1896, the Council of the ROYAL ASIATIC SOCIETY earnestly recommended its adoption (so far as possible) by all in this country engaged in Oriental studies, "that the very great benefit of a uniform system" may be gradually obtained.

I.

SANSKRIT AND ALLIED ALPHABETS.

अ a	ओ o	ट ṭ	ब b
आ ā	औ au	ठ ṭh	भ bh
इ i	क k	ड ḍ	म m
ई ī	ख kh	ढ ḍh	य y
उ u	ग g	ण ṇ	र r
ऊ ū	घ gh	त t	ल l
ऋ ṛ	ङ ṅ	थ th	व v
ॠ ṝ	च c	द d	श ś
ऌ ḷ	छ ch	ध dh	ष ṣ
ॡ ḹ	ज j	न n	स s
ए e	झ jh	प p	ह h
ऐ ai	ञ ñ	फ ph	ळ ḷ

◌̣ (Anusvāra) m

◌̤ (Anunāsika) ṁ

◌̥ (Visarga) ḥ

× (Jihvāmūlya) ḥ

× (Upadhmanīya) ḥ

◌̇ (Aragraha) ˙

Uddatta ˆ

Svarita ˜

Anudatta ˘

II.

ARABIC AND ALLIED ALPHABETS.

ا at beginning of word omit;	ك k	ا a
elsewhere <u>ا</u> or <u>ا</u>	ل l	ي i
ب b	س s	م m
ت t	ش . s or <u>sh</u>	و u
ث . t or <u>th</u>	ص . s or z	و . w or v
ج . j or <u>dj</u>	ض d, <u>dz</u> , or z	ه h
ح h	ط t	ي y
خ . h or <u>kh</u>	ظ z	
د d	ع e	
ذ . d or <u>dh</u>	غ . g or <u>gh</u>	
ر r	ف f	
ز z	ق q	

DIPHTHONGS.

ا ai

او au

واو 'a

hamza ا or ا

silent t . . h

letter not pronounced . . —

VOWELS.

ADDITIONAL LETTERS.

PERSIAN, HINDI, AND PAKHTŪ.	TURKISH ONLY.	HINDI AND PAKHTŪ.	PAKHTŪ ONLY.
پ p	پ when pro- nounced as g k	پ or ت . t	پ ts
چ . c or <u>ch</u>		چ or د . d	چ q
ژ . z or <u>zh</u>		ژ or ز . r	ژ n
گ g	گ n		گ ksh



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1914 ..	76	12	459	67	1	31	161	807
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Elected since	70	11	425	66	1	31	159	763
	5	...	64	2	11	82
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	+2	+1	+1	+4
	-1	...	-2	-1	-4
Feb. 9, 1915	76	12	488	67	1	31	170	845

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